



# STIC EIC 2100 ~~131163~~ Search Request Form 131163

117

Today's Date: 8/30/99

What date would you like to use to limit the search?

Priority Date: 11/09/99 Other:

Name: Mohammed Ali

Format for Search Results (Circle One):

AU: 2177 Examiner #: 782114

PAPER DISK EMAIL

Room #: 4418 Phone: 605-4356

Where have you searched so far?

Serial #: 09/436.506

USP DWPI EPO IPO ACM IBM TDB  
IEEE INSPEC SPI Other

Is this a "Fast & Focused" Search Request? (Circle One) YES NO

A "Fast & Focused" Search is completed in 2-3 hours (maximum). The search must be on a very specific topic and meet certain criteria. The criteria are posted in EIC2100 and on the EIC2100 NPL Web Page at <http://ptoweb/patents/stic/stic-tc2100.htm>.

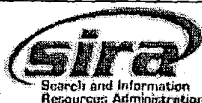
What is the topic, novelty, motivation, utility, or other specific details defining the desired focus of this search? Please include the concepts, synonyms, keywords, acronyms, definitions, strategies, and anything else that helps to describe the topic. Please attach a copy of the abstract, background, brief summary, pertinent claims and any citations of relevant art you have found.

Accessing data from one of two storage devices maintaining a copy of data. Selecting one of the storage devices from which to recall a data set.

"data set #", "maintain flag #", "storage device #", "fail #", "Separate level data", "Previous access attempt #", "ignore #"

STIC Searcher: Geoffrey St. Leger Phone: 308-7800

Date picked up: 8/30/99 Date Completed: 8/30/99



File 347:JAPIO Nov 1976-2004/Apr(Updated 040802)  
(c) 2004 JPO & JAPIO  
File 350:Derwent WPIX 1963-2004/UD,UM &UP=200455  
(c) 2004 Thomson Derwent

Set	Items	Description
S1	7358649	STORE OR STORES OR STORAGE OR DEVICE? ? OR SERVER? ? OR DRIVE? ? OR DATABASE? ? OR DATA()BASE? ? OR REPOSITOR??? OR VOLUME? ? OR TAPE OR TAPES OR CASSETTE? ? OR DISK? ? OR DISC? ?
S2	199711	(MULTIPLE OR MULTIPLICITY OR SEVERAL OR PLURAL? OR DUAL??? OR SEPARATE OR DIFFERENT OR VARIOUS OR MIRRORED OR REDUNDANT - OR FARM? ? OR SECOND??? OR 2ND OR TWO) (2W)S1
S3	2235	STORAGE()AREA()NETWORK? ? OR SAN OR SANS
S4	10931	S1(7N)(RECENT OR CURRENT??? OR LATEST OR LATER OR NEWEST OR NEWER OR NEW OR UP(1W)DATE OR FRESH OR FRESHEST) (7N) (SELECT? - ?? OR CHOOS??? OR CHOSEN? OR DESIGNAT? OR PICK??? OR SPECIFY? - ?? OR SPECIFIE? ? OR INDICATE? ? OR INDICATING)
S5	136662	S1(7N)(COPY OR COPIES OR DUPLICAT? OR MIRRORED OR REPLICA? OR SAME OR IDENTICAL?)
S6	52	S2:S3 AND S4 AND S5
S7	25	S6 AND AC=US/PR
S8	17	S7 AND AY=(1979:1999)/PY
S9	36	S6 AND PY=1970:1999
S10	42	S8:S9
S11	24616	(ARRAY? ? OR PAIR? ? OR CLUSTER? ?) (2W)S1
S12	7	S11 AND S4 AND S5
S13	5	S12 NOT S10
S14	77695	(UPDAT??? OR CHANG??? OR REVIS??? OR MODIF???? OR MODIFICATION OR VERSION? ?) (5N) (COUNT??? OR LOG? ? OR LOGGING OR HISTOR??? OR FREQUENC??? OR INCIDENCE OR TABLE? ? OR FILE? ? OR LIST????)
S15	23	(S2:S3 OR S11) AND S4 AND S14
S16	22	S15 NOT (S10 OR S13)
S17	772	(S2:S3 OR S11) AND S4
S18	248	S17 AND IC=G06F
S19	6545	S1(7N)(RECENT OR CURRENT??? OR LATEST OR LATER OR NEWEST OR NEWER OR NEW OR UP(1W)DATE OR FRESH OR FRESHEST) (7N) (SELECT? - ?? OR CHOOS??? OR CHOSEN? OR PICK???)
S20	141	S18 AND S19
S21	120	S20 NOT (S10 OR S13 OR S16)
S22	58	S21 AND AC=US/PR
S23	40	S22 AND AY=(1970:1999)/PR
S24	70	S21 AND PY=1970:1999
S25	80	S23:S24
S26	112	S19 AND S14
S27	53	S26 AND IC=G06F
S28	46	S27 NOT (S10 OR S13 OR S16 OR S25)
S29	14	S28 AND AC=US/PR
S30	10	S29 AND AY=(1970:1999)/PR
S31	26	S28 AND PY=1970:1999
S32	14	S29:S30
S33	33	S31:S32
S34	67	AU=KISHI G?
S35	3	AU=BISH T?
S36	2	S34 AND S35

10/5/24 (Item 13 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2004 Thomson Derwent. All rts. reserv.

012040579 \*\*Image available\*\*

WPI Acc No: 1998-457489/ 199839

XRPX Acc No: N98-357058

**Telecommunications network with several telephone exchanges - has identical databases with each telephone exchange adapted at given time, to access database and has information specifying address and status for each database**

Patent Assignee: TELIA AB (TELI-N)

Inventor: ALEXANDERSSON R; LUNDSTROEM J; LUNDSTROEM J

Number of Countries: 023 Number of Patents: 005

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 9836547	A1	19980820	WO 98SE149	A	19980202	199839 B
SE 9700494	A	19980814	SE 97494	A	19970213	199844
NO 9903423	A	19991012	WO 98SE149	A	19980202	199953
			NO 993423	A	19990712	
EP 960519	A1	19991201	EP 98904463	A	19980202	200001
			WO 98SE149	A	19980202	
SE 518011	C2	20020813	SE 97494	A	19970213	200260

Priority Applications (No Type Date): SE 97494 A 19970213

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
-----------	------	-----	----	----------	--------------

WO 9836547	A1	E	36	H04M-003/08	
------------	----	---	----	-------------	--

Designated States (National): EE LT LV NO US

Designated States (Regional): AT BE CH DE DK ES FI FR GB GR IE IT LU MC

NL PT SE

SE 9700494	A			H04M-003/08	
------------	---	--	--	-------------	--

NO 9903423	A			H04M-000/00	
------------	---	--	--	-------------	--

EP 960519	A1	E		H04M-003/08	Based on patent WO 9836547
-----------	----	---	--	-------------	----------------------------

Designated States (Regional): CH DE DK FI FR GB LI LT LV NL SE

SE 518011	C2			H04M-003/08	
-----------	----	--	--	-------------	--

Abstract (Basic): WO 9836547 A

The network includes several telephone exchanges, m and **several identical databases**, n, where m is greater than n, in which each telephone exchange is adapted, at a given time, to access one database. Each telephone exchange has information which specifies an address status for each database in the telecommunications network.

The database accessed by a telephone exchange, is selected on a dynamic basis by that telephone exchange. The database will be accessed, at a given time, by each telephone exchange, is selected on a random dynamic basis. When a **database** is **selected** by a telephone exchange fails, or goes down, the telephone exchange is adapted to **select a new database** on a random basis.

ADVANTAGE - Enables clients to be provided with more information on overall system architecture.

Dwg.1/2

Title Terms: TELECOMMUNICATION; NETWORK; TELEPHONE; EXCHANGE; IDENTICAL; TELEPHONE; EXCHANGE; ADAPT; TIME; ACCESS; DATABASE; INFORMATION; SPECIFIED; ADDRESS; STATUS; DATABASE

Derwent Class: W01

International Patent Class (Main): H04M-000/00; H04M-003/08

International Patent Class (Additional): H04Q-003/00

File Segment: EPI

10/5/28 (Item 17 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2004 Thomson Derwent. All rts. reserv.

011042824 \*\*Image available\*\*

WPI Acc No: 1997-020748/ 199702

Related WPI Acc No: 1997-235506; 2000-328211; 2002-162790; 2002-237437;

2004-009254

XRPX Acc No: N97-017284

**Data writing method into storage disk in disk array system - involves generating new error correcting code by using read out three data for one data group after updating of old write data by new write data**

Patent Assignee: HITACHI LTD (HITA )

Inventor: KAKUTA H; TAKAMOTO Y

Number of Countries: 002 Number of Patents: 008

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5579474	A	19961126	US 93173557	A	19931222	199702 B
			US 94248452	A	19940524	
JP 2000330727	A	20001130	JP 93125766	A	19930527	200102
			JP 2000118555	A	19930527	
JP 3176157	B2	20010611	JP 92348301	A	19921228	200135
JP 3234211	B2	20011204	JP 93125766	A	19930527	200203
			JP 2000118555	A	19930527	
JP 3256329	B2	20020212	JP 93125766	A	19930527	200213
JP 2002196893	A	20020712	JP 93125766	A	19930527	200261
			JP 2001330516	A	19930527	
JP 2003296046	A	20031017	JP 2001330516	A	19930527	200370 N
			JP 2003115268	A	19930527	
JP 3542577	B2	20040714	JP 93125766	A	19930527	200446
			JP 2001330516	A	19930527	

Priority Applications (No Type Date): JP 93125766 A 19930527; JP 92348301 A 19921228; JP 2000118555 A 19930527; JP 2001330516 A 19930527; JP 2003115268 A 19930527

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5579474	A	28	G06F-011/34	CIP of application US 93173557	
JP 2000330727	A	18	G06F-003/06	Div ex application JP 93125766	
JP 3176157	B2	33	G06F-003/06	Previous Publ. patent JP 6202817	
JP 3234211	B2	18	G06F-003/06	Div ex application JP 93125766	
				Previous Publ. patent JP 2000330727	
JP 3256329	B2	21	G06F-003/06	Previous Publ. patent JP 6332632	
JP 2002196893	A	26	G06F-003/06	Div ex application JP 93125766	
JP 2003296046	A	25	G06F-003/06	Div ex application JP 2001330516	
JP 3542577	B2	24	G06F-003/06	Div ex application JP 93125766	
				Previous Publ. patent JP 2002196893	

Abstract (Basic): US 5579474 A

The method involves generating error correcting code from (m-1) write data supplied from an upper unit. The (m-1) write data and the error correcting code are written as one data group, in space fields belonging to one **drive** within a number of drives of a data **storage**. In responsive to an update request, **new** write data **designated** by the update request is written, as one data group, to **two drives** within the drives other than the m **drives** as a pair of **duplicated** write data belonging to the data group. A new error correcting code is generated by using the read out three data for the one data group after updating of the old write data by the new write data. The old error correcting code written is updated by the generated new error correcting code.

ADVANTAGE - Provides high performance of input/output operation. Allocates duplicated fields in parity group to reduce overhead of data write.

Dwg.5/14

Title Terms: DATA; WRITING; METHOD; STORAGE; DISC; DISC; ARRAY; SYSTEM; GENERATE; NEW; ERROR; CORRECT; CODE; READ; THREE; DATA; ONE; DATA; GROUP; AFTER; UPDATE; WRITING; DATA; NEW; WRITING; DATA

Derwent Class: T01; T03

International Patent Class (Main): G06F-003/06; G06F-011/34

International Patent Class (Additional): G06F-011/10; G06F-012/00;

G06F-012/08; G06F-012/10; G06F-012/16

File Segment: EPI

10/5/32 (Item 21 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2004 Thomson Derwent. All rts. reserv.

010436698 \*\*Image available\*\*  
WPI Acc No: 1995-338014/ 199544  
XRPX Acc No: N95-253533

CD-ROM optical storage cache system - using primary RAM cache and  
secondary disk cache systems

Patent Assignee: BALLARD SYNERGY CORP (BALL-N); BALLARD C L (BALL-I)  
Inventor: BALLARD C L

Number of Countries: 019 Number of Patents: 006

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 667579	A1	19950816	EP 94202313	A	19940812	199544 B
JP 7225714	A	19950822	JP 94307611	A	19941212	199544
US 5584007	A	19961210	US 94194104	A	19940209	199704
US 5588129	A	19961224	US 94193991	A	19940209	199706
			US 96585808	A	19960116	
US 5721866	A	19980224	US 94194104	A	19940209	199815
			US 96664859	A	19960617	
US 5764945	A	19980609	US 94194104	A	19940209	199830
			US 96585808	A	19960126	
			US 96664454	A	19960617	

Priority Applications (No Type Date): US 94194104 A 19940209; US 94193991 A  
19940209; US 96585808 A 19960116; US 96664859 A 19960617; US 96664454 A  
19960617

Cited Patents: EP 273665; EP 389151; EP 475639

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 667579	A1	E	59	G06F-012/08	
Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE					
JP 7225714	A		38		
US 5584007	A		52	G06F-012/08	
US 5588129	A		52	G06F-012/16	Cont of application US 94193991
US 5721866	A		51	G06F-012/08	Cont of application US 94194104 Cont of patent US 5584007
US 5764945	A			G06F-012/08	Cont of application US 94194104 Cont of application US 96585808

Abstract (Basic): EP 667579 A

The optical disk system for a computer includes a multiple media cache system. The computer is interfaced with the cache system (100) which in turn interfaces to one or more optical disks (70). The cache system includes a primary cache utilising RAM that can be part, e.g. 256K of the computer's normal memory (88). The secondary cache utilises hard drive disk (60).

Caching only occurs under certain circumstances, and not performed when 1) transfer rates exceed certain limits; 2) the estimated time to complete a CD-ROM transfer is close to the estimated time of hard disk transfer. Fragmentation is also avoided.

ADVANTAGE - Improves access times to CD-ROM drives while being able to be implemented on normal computer using limited RAM.

Dwg.3/13

Title Terms: CD; ROM; OPTICAL; STORAGE; CACHE; SYSTEM; PRIMARY; RAM; CACHE;  
SECONDARY; DISC; CACHE; SYSTEM

Derwent Class: T01

International Patent Class (Main): G06F-012/08; G06F-012/16

File Segment: EPI

10/5/34 (Item 23 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2004 Thomson Derwent. All rts. reserv.

010159867 \*\*Image available\*\*  
WPI Acc No: 1995-061120/ 199508

XRPX Acc No: N95-048564

**Distributed storage space management on networked computer system -  
selectively copies binary objects stored on storage devices and  
calculates current value for binary object identifier**

Patent Assignee: LEGENT CORP (LEGE-N)

Inventor: BERLIN J H; MORE W R; WOODHILL J R; WOODHILL L R

Number of Countries: 021 Number of Patents: 007

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 9501599	A1	19950112	WO 94US7561	A	19940701	199508 B
AU 9472189	A	19950124	AU 9472189	A	19940701	199520
EP 706686	A1	19960417	EP 94921476	A	19940701	199620
			WO 94US7561	A	19940701	
US 5649196	A	19970715	US 9385596	A	19930701	199734
			US 95555376	A	19951109	
AU 682523	B	19971009	AU 9472189	A	19940701	199749
EP 706686	B1	19981014	EP 94921476	A	19940701	199845
			WO 94US7561	A	19940701	
DE 69413977	E	19981119	DE 613977	A	19940701	199901
			EP 94921476	A	19940701	
			WO 94US7561	A	19940701	

Priority Applications (No Type Date): US 9385596 A 19930701; US 95555376 A 19951109

Cited Patents: 2.Jnl.Ref; US 5133065

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
-----------	------	-----	----	----------	--------------

WO 9501599	A1	E	79	G06F-011/14	
------------	----	---	----	-------------	--

Designated States (National): AU CA JP

Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE

AU 9472189	A			G06F-011/14	Based on patent WO 9501599
------------	---	--	--	-------------	----------------------------

EP 706686	A1	E	11	G06F-011/14	Based on patent WO 9501599
-----------	----	---	----	-------------	----------------------------

Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE

US 5649196	A		27	G06F-011/00	Cont of application US 9385596
------------	---	--	----	-------------	--------------------------------

AU 682523	B			G06F-011/14	Previous Publ. patent AU 9472189
-----------	---	--	--	-------------	----------------------------------

Based on patent WO 9501599

EP 706686	B1	E		G06F-011/14	Based on patent WO 9501599
-----------	----	---	--	-------------	----------------------------

Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE

DE 69413977	E			G06F-011/14	Based on patent EP 706686
-------------	---	--	--	-------------	---------------------------

Based on patent WO 9501599

Abstract (Basic): WO 9501599 A

The management system includes at least **two storage devices** (19) to store files comprised of one or more binary objects. The system (24) selectively copies (206) the binary objects stored on one of the **storage devices** to another of the **storage devices**. A **current** value is calculated for a binary object identifier (74) for **selected** binary objects stored on the **storage** devices where the calculation of the binary object identifier is based upon the actual data contents of the associated binary object.

The current value of the binary object identifier is stored as a previous value of the binary object identifier. The current value of the binary object identifier associated with a particular binary object is compared to one or more previous values of the binary object identifier associated with that particular binary object. Binary objects are selectively copied in response to the comparison result.

ADVANTAGE - Capable of operating on networked system incorporating various types of computers and operating systems, capable of operating with minimum amount of human intervention.

Dwg.1/5

Title Terms: DISTRIBUTE; STORAGE; SPACE; MANAGEMENT; COMPUTER; SYSTEM;

SELECT; COPY; BINARY; OBJECT; STORAGE; STORAGE; DEVICE; CALCULATE;

CURRENT; VALVE; BINARY; OBJECT; IDENTIFY

Derwent Class: T01

International Patent Class (Main): G06F-011/00; G06F-011/14

File Segment: EPI

10/5/36 (Item 25 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

009004981 \*\*Image available\*\*

WPI Acc No: 1992-132278/ 199216

XRPX Acc No: N92-098640

**Fault tolerant computer backup system utilising multiple processors -  
uses replicated system servers to back up process in event of primary  
system failure connected via communications channel**

Patent Assignee: NOVELL INC (NOVE-N)

Inventor: MAJOR D; NEIBAUR D; POWELL K

Number of Countries: 036 Number of Patents: 019

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 9205487	A	19920402	WO 91US5679	A	19910809	199216 B
AU 9184310	A	19920415	AU 9184310	A	19910809	199230
			WO 91US5679	A	19910809	
US 5157663	A	19921020	US 90586807	A	19900924	199245
EP 550457	A1	19930714	EP 91915106	A	19910809	199328
			WO 91US5679	A	19910809	
FI 9301276	A	19930521	WO 91US5679	A	19910809	199330
			FI 931276	A	19930323	
BR 9106875	A	19930720	BR 916875	A	19910809	199333
			WO 91US5679	A	19910809	
NO 9301062	A	19930524	WO 91US5679	A	19910809	199333
			NO 931062	A	19930323	
JP 6504389	W	19940519	JP 91514515	A	19910809	199424
			WO 91US5679	A	19910809	
AU 660939	B	19950713	AU 9184310	A	19910809	199535
US 5455932	A	19951003	US 90586807	A	19900924	199545
			US 92964077	A	19921020	
EP 550457	A4	19951025	EP 91915106	A		199620
EP 550457	B1	19970423	EP 91915106	A	19910809	199721
			WO 91US5679	A	19910809	
DE 69125840	E	19970528	DE 625840	A	19910809	199727
			EP 91915106	A	19910809	
			WO 91US5679	A	19910809	
NO 302986	B1	19980511	WO 91US5679	A	19910809	199825
			NO 931062	A	19930323	
FI 101432	B1	19980615	WO 91US5679	A	19910809	199833
			FI 931276	A	19930323	
RU 2108621	C1	19980410	WO 91US5679	A	19910809	199846
			RU 935211	A	19910809	
CA 2091993	C	19981222	CA 2091993	A	19910809	199910
KR 137406	B1	19980701	WO 91US5679	A	19910809	200017
			KR 93700894	A	19930324	
JP 3156083	B2	20010416	JP 91514515	A	19910809	200124
			WO 91US5679	A	19910809	

Priority Applications (No Type Date): US 90586807 A 19900924; US 92964077 A 19921020

Cited Patents: US 4471429; US 4530052; US 4615001; US 4941087; US 4959768; US 4979108; EP 143125; EP 441087

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 9205487 A E 35

Designated States (National): AT AU BB BG BR CA CS DE DK FI GB HU JP KP KR LK LU MG MN MW NL NO PL RO SD SE SU

Designated States (Regional): AT BE CH DE DK ES FR GB GR IT LU NL SE

AU 9184310 A G06F-011/20 Based on patent WO 9205487

US 5157663 A 17 G06F-011/20

EP 550457 A1 E G06F-011/20 Based on patent WO 9205487

Designated States (Regional): AT BE CH DE DK ES FR GB GR IT LI LU NL

FI 9301276 A G06F-000/00

BR 9106875	A	G06F-011/20	Based on patent WO 9205487
NO 9301062	A	G06F-011/20	
JP 6504389	W	G06F-011/18	Based on patent WO 9205487
AU 660939	B	G06F-011/20	Previous Publ. patent AU 9184310
			Based on patent WO 9205487
US 5455932	A	15 G06F-011/34	Cont of application US 90586807
			Cont of patent US 5157663
EP 550457	B1 E	24 G06F-011/20	Based on patent WO 9205487
Designated States (Regional): AT			BE CH DE DK ES FR GB GR IT LI LU NL SE
DE 69125840	E	G06F-011/20	Based on patent EP 550457
			Based on patent WO 9205487
NO 302986	B1	G06F-011/20	Previous Publ. patent NO 9301062
FI 101432	B1	G06F-011/20	Previous Publ. patent FI 9301276
RU 2108621	C1	G06F-015/16	
CA 2091993	C	G06F-011/20	
KR 137406	B1	G06F-011/20	
JP 3156083	B2	19 G06F-011/18	Previous Publ. patent JP 6504389
			Based on patent WO 9205487

Abstract (Basic): WO 9205487 A

The software solution for backup provision utilises primary (21) and **secondary** (22) **servers**, each with an operating system, connected via a communications channel (15). In each server an input-output engine (12, 18) handles all data and a asynchronous events in the system, by interfacing with all physical devices (44) and device drivers.

All data receiver by the operating system OS engine (10, 16) use standard formats in a message queue. The input-output engines on each **server** co-ordinate with each other, providing the **same** sequence of messages to both OS engines.

USE/ADVANTAGE - Allows replicated system to take over operations without interruption. Does not need specialised hardware and is transparent to asynchronous events esp. for network server.

Dwg.1/7

Title Terms: FAULT; TOLERATE; COMPUTER; SYSTEM; UTILISE; MULTIPLE; PROCESSOR; REPLICA; SYSTEM; SERVE; BACK; UP; PROCESS; EVENT; PRIMARY; SYSTEM; FAIL; CONNECT; COMMUNICATE; CHANNEL

Derwent Class: T01; W01

International Patent Class (Main): G06F-000/00; G06F-011/18; G06F-011/20; G06F-011/34; G06F-015/16

International Patent Class (Additional): G06F-013/00

File Segment: EPI

10/5/38 (Item 27 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

008829941 \*\*Image available\*\*

WPI Acc No: 1991-333957/ 199146

XRPX Acc No: N91-255923

**State determination for mirrored storage units in data processor - stores, state information on each storage unit of mirrored pair and in alternative location and uses alternate state**

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC ); IBM CORP (IBMC )

Inventor: LAWRENCE K J; MCDERMOTT M J

Number of Countries: 005 Number of Patents: 006

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 455922	A	19911113	EP 90480225	A	19901228	199146	B
EP 455922	A3	19921230	EP 90480225	A	19901228	199345	
US 5430866	A	19950704	US 90522345	A	19900511	199532	
			US 94224388	A	19940407		
EP 455922	B1	19960911	EP 90480225	A	19901228	199641	
DE 69028517	E	19961017	DE 628517	A	19901228	199647	
			EP 90480225	A	19901228		
JP 2994070	B2	19991227	JP 9186357	A	19910326	200006	



Priority Applications (No Type Date): US 90522345 A 19900511; US 94224388 A 19940407

Cited Patents: SR.Pub; EP 303855; EP 405925; US 4342079

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
-----------	------	-----	----	----------	--------------

EP 455922	A		18		
-----------	---	--	----	--	--

Designated States (Regional): DE FR GB

JP 2994070	B2		10	G06F-003/06	Previous Publ. patent JP 5307445
------------	----	--	----	-------------	----------------------------------

EP 455922	A3		18		
-----------	----	--	----	--	--

US 5430866	A		17	G06F-011/16	Cont of application US 90522345
------------	---	--	----	-------------	---------------------------------

EP 455922	B1 E		22	G06F-011/20	
-----------	------	--	----	-------------	--

Designated States (Regional): DE FR GB

DE 69028517	E			G06F-011/20	Based on patent EP 455922
-------------	---	--	--	-------------	---------------------------

Abstract (Basic): EP 455922 A

The data processing system having a pair of **mirrored storage** units (121, 131) maintains a state record of the mirrored pair in system memory (103). In order to be able to determine state when the system is re-initialised, this state information is also stored in each **storage** unit of the **mirrored** pair and in an alternate location (104). When the state changes, the operating system writes the new state to those storage units which are still functioning and to an alternate location. Only certain defined state transitions are permitted.

When the system is re-initialised, it attempts to read the state information stored on the storage units. If either unit can not be read, the system substitutes the state retrieved from the alternate state record for the state that would have been read from the non-responding unit. This pair of states from the two units index a unique entry in a state derivation table containing the resultant state.

ADVANTAGE - Prevents ambiguous situations. (18pp Dwg.No.1/4

Title Terms: STATE; DETERMINE; MIRROR; STORAGE; UNIT; DATA; PROCESSOR; STORAGE; STATE; INFORMATION; STORAGE; UNIT; MIRROR; PAIR; ALTERNATIVE; LOCATE; ALTERNATE; STATE

Derwent Class: T01

International Patent Class (Main): G06F-003/06; G06F-011/16; G06F-011/20

International Patent Class (Additional): G06F-011/14; G06F-012/00

File Segment: EPI

10/5/39 (Item 28 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

008505155 \*\*Image available\*\*

WPI Acc No: 1991-009239/ 199102

XRPX Acc No: N91-007241

**Duplicate-data system - transfers data from storage medium to shadow storage medium without interrupting input-output operations**

Patent Assignee: DIGITAL EQUIP CORP (DIGI ); NIPPON DIGITAL EQUIP KK (DIGI )

Inventor: DAVIS S H; GOLEMAN W L; THIEL D W

Number of Countries: 018 Number of Patents: 007

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 405926	A	19910102	EP 90306996	A	19900626	199102 B
AU 9058067	A	19910103				199108
CA 2020272	A	19901231				199112
US 5210865	A	19930511	US 89374528	A	19890630	199320
			US 92925307	A	19920804	
TW 215124	A	19931021	TW 90108532	A	19901011	199402
EP 405926	B1	19961204	EP 90306996	A	19900626	199702
DE 69029289	E	19970116	DE 629289	A	19900626	199708
			EP 90306996	A	19900626	

Priority Applications (No Type Date): US 89374528 A 19890630; US 92925307 A 19920804

Cited Patents: 1.Jnl.Ref; A3...9150; JP 59201297; NoSR.Pub; US 4686620

Patent Details:

Patent No	Kind	Lang	Pg	Main IPC	Filing Notes
US 5210865	A		12	G06F-013/00	Cont of application US 89374528
EP 405926	B1 E		17	G06F-011/14	
Designated States (Regional): AT BE CH DE DK ES FR GB GR IT LI LU NL SE					
DE 69029289	E			G06F-011/14	Based on patent EP 405926
TW 215124	A			G06F-013/38	

Abstract (Basic): EP 405926 A

The shadowing system includes a number of hosts (9) communicating directly to **two** or more **storage** subsystems (17). Each shadow set (17) has its own disc controller (18) which controls input/output requests to disc (20) and allows input/output operations to continue if a disc controller fails.

When adding a **new disc** to the shadow set, one of the hosts is **chosen** to supply the **new disc** with all of the data stored on the active **disc** of the shadow set making both accurate and consistent. During the copying operation all changes to the shadow set data are propagated to the new disc.

ADVANTAGE - Max. availability of data during shadowing operations.

(13pp Dwg.No.1/5

Title Terms: DUPLICATE; DATA; SYSTEM; TRANSFER; DATA; STORAGE; MEDIUM; SHADOW; STORAGE; MEDIUM; INTERRUPT; INPUT; OUTPUT; OPERATE

Derwent Class: T01

International Patent Class (Main): G06F-011/14; G06F-013/00; G06F-013/38

International Patent Class (Additional): G06F-011/16; G06F-011/20;

G06F-012/02; G06F-012/16; G06F-015/20

25/5/18 (Item 4 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2004 Thomson Derwent. All rts. reserv.

014222221 \*\*Image available\*\*  
WPI Acc No: 2002-042919/200206  
XRPX Acc No: N02-031856

**Automatic video multiplexer for automatically selecting an input device from plural such devices coupled to an information handling system via plural inputs**

Patent Assignee: SPOTWARE TECHNOLOGIES INC (SPOT-N); GATEWAY INC (GATE-N)  
Inventor: COLBATH M A

Number of Countries: 027 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 1081950	A2	20010307	EP 2000118797	A	20000830	200206 B
JP 2001084126	A	20010330	JP 2000142950	A	20000516	200206
US 6591314	B1	20030708	US 99385979	A	19990830	200353

Priority Applications (No Type Date): US 99385979 A 19990830

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
-----------	------	-----	----	----------	--------------

EP 1081950	A2	E	10	H04N-007/10	
------------	----	---	----	-------------	--

Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT  
LI LT LU LV MC MK NL PT RO SE SI

JP 2001084126	A	12	G06F-003/14
---------------	---	----	-------------

US 6591314	B1	G06F-003/00
------------	----	-------------

Abstract (Basic): EP 1081950 A2

NOVELTY - A central processor (102) controls the information handling system (100) and communication is implemented through a system bus (110) for transferring information among the components, while a display system (112) connects to a display device (114) and an input/output system (116) connects to one or more input/output devices (118,120). A selector selects an input on which a signal is detected from a new input device and the new device is configured to operate with the handling system.

DETAILED DESCRIPTION - AN INDEPENDENT CLAIM is included for a method for automatically selecting an input device from plural input devices .

USE - Automatic input selection in an information handling system.

ADVANTAGE - Automatic switching to new input device without user intervention.

DESCRIPTION OF DRAWING(S) - The drawing is a block diagram of the information handling system

Central processor (102)

Handling system (100)

Display system (112)

Input/output system (116)

pp; 10 DwgNo 1/3

Title Terms: AUTOMATIC; VIDEO; MULTIPLEX; AUTOMATIC; SELECT; INPUT; DEVICE;

PLURAL; DEVICE; COUPLE; INFORMATION; HANDLE; SYSTEM; PLURAL; INPUT

Derwent Class: W01; W03; W04

International Patent Class (Main): G06F-003/00 ; G06F-003/14 ;

H04N-007/10

International Patent Class (Additional): G06F-003/16 ; G06F-013/14 ;

H04N-005/268; H04N-005/44

File Segment: EPI

25/5/24 (Item 10 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2004 Thomson Derwent. All rts. reserv.

013178588 \*\*Image available\*\*  
WPI Acc No: 2000-350461/200030  
XRPX Acc No: N00-262617

**Hypertext document data accessing method in Internet, involves accessing**

hypertext document data stored in storage location which is selected,  
based on preset selection criteria

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC ); BATES C L (BATE-I);  
DAY P R (DAYP-I)

Inventor: BATES C L; DAY P R

Number of Countries: 028 Number of Patents: 009

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 200023913	A1	20000427	WO 99US3460	A	19990218	200030	B
EP 1131742	A1	20010912	EP 99970760	A	19990218	200155	
			WO 99US3460	A	19990218		
CZ 200101380	A3	20010912	WO 99US3460	A	19990218	200158	
			CZ 20011380	A	19990218		
KR 2001075245	A	20010809	KR 2001703594	A	20010321	200211	
CN 1323423	A	20011121	CN 99812303	A	19990218	200218	
HU 200103782	A2	20020228	WO 99US3460	A	19990218	200223	
			HU 20013782	A	19990218		
JP 2002528792	W	20020903	WO 99US3460	A	19990218	200273	
			JP 2000577586	A	19990218		
US 20030188263	A1	20031002	US 98174952	A	19981019	200365	
US 6751777	B2	20040615	US 98174952	A	19981019	200439	

Priority Applications (No Type Date): US 98174952 A 19981019

Patent Details:

Patent No	Kind	Lang	Pg	Main IPC	Filing Notes
WO 200023913	A1	E	71	G06F-017/21	
Designated States (National): CA CN CZ HU IL JP KR PL					
Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LU					
MC NL PT SE					
EP 1131742	A1	E		G06F-017/21	Based on patent WO 200023913
Designated States (Regional): BE CH DE ES FR GB IE IT LI NL SE					
CZ 200101380	A3			G06F-017/21	Based on patent WO 200023913
KR 2001075245	A			G06F-017/30	
CN 1323423	A			G06F-017/21	
HU 200103782	A2			G06F-017/21	Based on patent WO 200023913
JP 2002528792	W		80	G06F-017/30	Based on patent WO 200023913
US 20030188263	A1			G06F-017/00	
US 6751777	B2			G06F-017/21	

Abstract (Basic): WO 200023913 A1

NOVELTY - An user input directed to multi-target link is received.  
The multi-target link is defined in hypertext document by multi-target  
hypertext link definition. The multi-target link identifies **several**  
associated **storage** locations that includes hypertext data. Data  
stored at the storage locations selected based on preset selection  
criteria, is then accessed.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for  
multi-target link apparatus.

USE - For accessing hypertext document data in Internet.

ADVANTAGE - By associating more than one storage location with  
hypertext link or book mark, a wide variety of unique features are  
supported. Previously viewed status of different document can be used  
to **select storage** location to favor retrieval of **new** documents  
over previously used documents.

DESCRIPTION OF DRAWING(S) - The figure shows block diagram of  
hardware and software environment for computer from networked computer  
system.

pp; 71 DwgNo 2/23

Title Terms: DOCUMENT; DATA; ACCESS; METHOD; ACCESS; DOCUMENT; DATA;  
STORAGE; STORAGE; LOCATE; SELECT; BASED; PRESET; SELECT; CRITERIA

Derwent Class: T01

International Patent Class (Main): G06F-017/00 ; G06F-017/21 ;  
G06F-017/30

International Patent Class (Additional): G06F-012/00

File Segment: EPI

(c) 2004 Thomson Derwent. All rts. reserv.

012498435 \*\*Image available\*\*

WPI Acc No: 1999-304539/ 199926

XRPX Acc No: N99-228286

**Network device configuring method e.g. for computer network**

Patent Assignee: HEWLETT-PACKARD CO (HEWP )

Inventor: GASE S T

Number of Countries: 027 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 918411	A1	19990526	EP 98111461	A	19980622	199926 B
JP 11316725	A	19991116	JP 98322284	A	19981112	200005
US 20020049693	A1	20020425	US 97975942	A	19971121	200233

Priority Applications (No Type Date): US 97975942 A 19971121

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

EP 918411 A1 E 11 H04L-012/24

Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT

LI LT LU LV MC MK NL PT RO SE SI

JP 11316725 A 8 G06F-013/00

US 20020049693 A1 G06F-007/00

Abstract (Basic): EP 918411 A1

NOVELTY - The method involves selecting **several devices** to be configured from a **database** containing a list of network **devices**. A setting to be changed on the **selected network devices** is **selected**. A **new** setting value for each of the **selected** settings is entered. Any **new** setting values are transmitted to a first **selected device**. The **database** is updated with the **new** setting values. The previous two stages are repeated for each of the **selected devices**.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for an apparatus for configuring **multiple device** on a computer network, and an apparatus for automatically assigning IP addressed from a range of IP addresses to the devices within a group of network devices.

USE - For computer network.

ADVANTAGE - Allows network administrator to both remotely initially configure one or more network devices and to simultaneously configure group of network device remotely.

DESCRIPTION OF DRAWING(S) - The figure shows a schematic representation of a network on which one embodiment of the invention may be implemented.

pp; 11 DwgNo 1/4

Title Terms: NETWORK; DEVICE; METHOD; COMPUTER; NETWORK

Derwent Class: W01

International Patent Class (Main): G06F-007/00 ; G06F-013/00 ;

H04L-012/24

International Patent Class (Additional): H04L-012/28; H04L-012/56;

H04L-029/12

File Segment: EPI

25/5/26 (Item 12 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

012360788 \*\*Image available\*\*

WPI Acc No: 1999-166895/ 199914

XRPX Acc No: N99-121607

**Spare disk allocation method during fault generation in multi disk drive**

Patent Assignee: FUJITSU LTD (FUIT )

Inventor: MORITA H; YORIMITSU K

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5872906	A	19990216	US 94253365	A	19940603	199914 B
			US 96690595	A	19960731	

Priority Applications (No Type Date): JP 93256217 A 19931014

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5872906	A	24	G06F-011/20	Cont of application	US 94253365

Abstract (Basic): US 5872906 A

NOVELTY - Spare disk unit connected to an interface port outside redundancy group to which failed disk unit belongs, is selected by referring to a device management table (54). Identifier (72) indicating whether disk unit is spare disk unit or not are stored in table using device numbers as an index, interface port numbers (76) and rank number (74).

DETAILED DESCRIPTION - Several data disk units (30-00 - 30-35) and parity disk unit (30-20 - 30-24) are allocated to each of plurality of ranks (R0-R3) and several data and their parities are stored in one redundancy group. One spare disk is allocated to at least two ranks among several ranks. Failure of arbitrary disk unit, read-write port of failed disk unit connected to particular interface port is detected. Data of failed disk unit is reconstructed into selected spare disk unit. A normal disk unit is allocated as a new spare disk unit when failed disk unit is exchanged with normal disk unit. An INDEPENDENT CLAIM is included for disk array.

USE - For allocating spare disk as a fault counter measure in multi disk device.

ADVANTAGE - Allocates several spare disk units so as to improve reliability. Selection of alternative destination by spare disk unit during failure occurrence is optimized thereby improving performance after data construction.

DESCRIPTION OF DRAWING(S) - The figure represents block diagram of spare disk allocation.

Disk units (30-00 - 30-35)

Device management table (54)

pp; 24 DwgNo 6/15

Title Terms: SPARE; DISC; ALLOCATE; METHOD; FAULT; GENERATE; MULTI; DISC; DRIVE

Derwent Class: T01; U21

International Patent Class (Main): G06F-011/20

File Segment: EPI

25/5/28 (Item 14 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

012127919 \*\*Image available\*\*

WPI Acc No: 1998-544831/ 199847

Related WPI Acc No: 1994-067354; 1998-508696; 1998-523371; 1998-523372; 1998-544830

XRPX Acc No: N98-424250

Data storing method in redundant array of disks coupled to host computer - gets new data from host computer, stores it in memory, selects area of one disk to store data, computes check information from new data and data read from other disk area

Patent Assignee: MITSUBISHI DENKI KK (MITQ )

Inventor: BABA H; ITOH K; MATSUMOTO T; OGURA S

Number of Countries: 003 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 874313	A2	19981028	EP 93113563	A	19930825	199847 B
			EP 98250107	A	19930825	

Priority Applications (No Type Date): JP 92226976 A 19920826

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 874313	A2	E	6	G06F-011/10	Div ex application EP 93113563 Div ex patent EP 584804

Designated States (Regional): DE FR GB

Abstract (Basic): EP 874313 A

The method receives new data from a host computer and **stores** it in a semiconductor memory (4). **New** data is written to a **selected** area of one **disk** in the array (9). The host computer is notified (13) that the storing of the new data is completed as soon as the writing ends. Data is read from another area of one other disk in the array. Check information is computed from the new data stored in the semiconductor memory and the data just read. The check information is written on a disk in the redundant array.

The check information steps are omitted if more new data to be stored is received from the host computer within a certain time. A processor carries out the data **storage** and executes the **selecting** areas, writing of **new** data and notifying of host as foreground tasks; whilst the steps of reading data from another area and computing check information are performed as background tasks.

ADVANTAGE - Provides faster speed of recovery from disk failure.

Dwg.1/3

Title Terms: DATA; STORAGE; METHOD; REDUNDANT; ARRAY; DISC; COUPLE; HOST; COMPUTER; NEW; DATA; HOST; COMPUTER; STORAGE; MEMORY; SELECT; AREA; ONE; DISC; STORAGE; DATA; COMPUTATION; CHECK; INFORMATION; NEW; DATA; DATA; READ; DISC; AREA

Derwent Class: T01; T03; U21

International Patent Class (Main): G06F-011/10

International Patent Class (Additional): G06F-003/06 ; G11B-020/18

File Segment: EPI

25/5/29 (Item 15 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

012127918 \*\*Image available\*\*

WPI Acc No: 1998-544830/ 199847

Related WPI Acc No: 1994-067354; 1998-508696; 1998-523371; 1998-523372; 1998-544831

XRPX Acc No: N98-424249

**New data storage method in redundant array of disks coupled to host computer - gets new data from host computer; stores in memory; selects area of one disk to store new data; computes check information from new data and data read from other disk area**

Patent Assignee: MITSUBISHI DENKI KK (MITQ )

Inventor: BABA H; ITOH K; MATSUMOTO T; OGURA S

Number of Countries: 003 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 874312	A2	19981028	EP 93113563	A	19930825	199847 B
			EP 98250106	A	19930825	

Priority Applications (No Type Date): JP 92226976 A 19920826

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 874312	A2	E	6	G06F-011/10	Div ex application EP 93113563 Div ex patent EP 584804

Designated States (Regional): DE FR GB

Abstract (Basic): EP 874312 A

The method receives new data from a host computer and **stores** it in a semiconductor memory (4). The **new** data is written into a **selected** area of one **disk** in the array (9). As soon as the writing ends, the host computer is notified (13) that the storing of the new data is completed.

Data is read from another area of one other disk in the array. Check information is computed from the new data stored in the semiconductor memory and the data just read. The check information is written on a disk in the redundant array. The check information steps are omitted if more new data to be stored is received from the host computer within a certain time.

USE - Replacing faulty disks in a **redundant array of disks** .

ADVANTAGE - Provides faster speed of recovery from disk failure.

Dwg.1/3

Title Terms: NEW; DATA; STORAGE; METHOD; REDUNDANT; ARRAY; DISC; COUPLE;  
HOST; COMPUTER; NEW; DATA; HOST; COMPUTER; STORAGE; MEMORY; SELECT; AREA;  
ONE; DISC; STORAGE; NEW; DATA; COMPUTATION; CHECK; INFORMATION; NEW; DATA  
; DATA; READ; DISC; AREA

Derwent Class: T01; T03; U21

International Patent Class (Main): **G06F-011/10**

International Patent Class (Additional): **G06F-003/06** ; G11B-020/18

File Segment: EPI

**25/5/30 (Item 16 from file: 350)**

DIALOG(R)File 350:Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

012106459 \*\*Image available\*\*

WPI Acc No: 1998-523371/ **199845**

Related WPI Acc No: 1994-067354; 1998-508696; 1998-523372; 1998-544830;  
1998-544831

XRPX Acc No: N98-408932

**Discs redundant group data storing - maintaining usage status table in semiconductor memory for indicating which areas are in use and which are not in use while new data to be stored in group of disks is received from host**

Patent Assignee: MITSUBISHI DENKI KK (MITQ )

Inventor: BABA H; ITOH K; MATSUMOTO T; OGURA S

Number of Countries: 003 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 871120	A2	19981014	EP 93113563	A	19930825	199845 B
			EP 98250105	A	19930825	

Priority Applications (No Type Date): JP 92226976 A 19920826

Cited Patents: No-SR.Pub

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 871120	A2	E	17	G06F-011/10	Div ex application EP 93113563
					Div ex patent EP 584804

Designated States (Regional): DE FR GB

Abstract (Basic): EP 871120 A

The method involves partitioning each disk in the group into areas. Certain areas are designated as data areas for storing data. Certain other areas are designated as check areas for storing check information of corresponding data areas disposed on **different disks** in the group. In a semiconductor memory, a usage status table (12) is maintained for indicating which areas are in use and which are not in use. New data to be stored in the group of disks is received from a host computer (13).

The method further entails **choosing selected** data areas in which to **store** the **new** data that is written in the **selected** data areas. **New** check information pertaining to the **new** data written in the **selected** areas is written in corresponding check areas, and to data in any corresponding areas indicated by the usage status table to be in use, but not pertaining to data areas not indicated to be in use.

ADVANTAGE - Improved speed of write access and speed of recovery from disc failure of **redundant array of discs** .

Dwg.4/9

Title Terms: DISC; REDUNDANT; GROUP; DATA; STORAGE; MAINTAIN; STATUS; TABLE  
; SEMICONDUCTOR; MEMORY; INDICATE; AREA; NEW; DATA; STORAGE; GROUP; DISC;  
RECEIVE; HOST

Derwent Class: T01; T03

International Patent Class (Main): **G06F-011/10**

International Patent Class (Additional): **G06F-003/06** ; G11B-020/18

File Segment: EPI



25/5/31 (Item 17 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2004 Thomson Derwent. All rts. reserv.

011970557 \*\*Image available\*\*  
WPI Acc No: 1998-387467/ 199833  
XRPX Acc No: N98-302195

**Information handling system for RAID system - includes I/O bus  
transferring data to and from processor with device subsystem including  
two RAID's**

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC )  
Inventor: CASSIDY B M; ISLAM S M R; MCNEILL A B  
Number of Countries: 001 Number of Patents: 001  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5774641	A	19980630	US 95528484	A	19950914	199833 B

Priority Applications (No Type Date): US 95528484 A 19950914

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 5774641	A	20	G06F-011/00	

Abstract (Basic): US 5774641 A

The system includes a processor complex including a unit generating a write command to write new data at a selected logical address. An I/O bus transfers data between to and from the processor complex. A storage device subsystem coupled to the I/O bus includes a RAID with at least a first storage device including: a unit receiving the write command from the processor complex; a unit reading old data located at the **selected** logical address within the first storage **device**; a unit writing the **new** data at the **selected** logical address within the first **storage device** within the **redundant array of storage devices**; a unit performing a logical operation within the first storage device between the new data and the old data to produce intermediate data; a unit transferring the intermediate data to over an input/output (I/O) bus.

A **second storage device** within the RAID includes a unit receiving the intermediate data over the bus; a unit reading old parity data located within the **second storage device**, where the old parity data corresponds to the old data; a unit performing a logical operation within the **second storage device** between the intermediate data and the old parity data to produce new parity data.

ADVANTAGE - Does not require expensive central controller. Provides scalable performance and cost as drives are added. Does not require excessive data transfers over communications bus during read/write operations.

Dwg.2/10

Title Terms: INFORMATION; HANDLE; SYSTEM; RAID; SYSTEM; BUS; TRANSFER; DATA  
; PROCESSOR; DEVICE; SUBSYSTEM; TWO

Derwent Class: T01

International Patent Class (Main): G06F-011/00

File Segment: EPI

25/5/33 (Item 19 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2004 Thomson Derwent. All rts. reserv.

011921328 \*\*Image available\*\*  
WPI Acc No: 1998-338238/ 199830  
XRPX Acc No: N98-264442

**Information processor with time synchronized server - has setting unit  
which sets time of server selected by determining unit as internal timer**

Patent Assignee: FUJI XEROX CO LTD (XERF )  
Number of Countries: 001 Number of Patents: 001  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 10124465	A	19980515	JP 96273740	A	19961016	199830 B

Priority Applications (No Type Date): JP 96273740 A 19961016

Patent Details:

Patent No	Kind	Lan	Pg	Main	IPC	Filing	Notes
JP 10124465	A		6	G06F-015/16			

Abstract (Basic): JP 10124465 A

The information processor (6) does the processing of information in network provided with **several servers** (1,2). Each server has a time acquisition unit which acquires the time during which various protocols of each server are active. Then, the acquired current time is compared and any offset in time is recognised by a recognition unit.

The reliability of time is judged in these **servers** based on the recognised offset. The **server** for which reliability is found to be high is **selected** by a determining unit and the **current** time of this **server** is set as an internal timer by a setting unit.

ADVANTAGE - Chooses optimum server from among **several servers**. Performs time synchronization. Holds time correctly even at time of failure generation.

Dwg.1/4

Title Terms: INFORMATION; PROCESSOR; TIME; SERVE; SET; UNIT; SET; TIME; SERVE; SELECT; DETERMINE; UNIT; INTERNAL; TIME

Derwent Class: T01

International Patent Class (Main): G06F-015/16

International Patent Class (Additional): G06F-001/14; G06F-013/00

File Segment: EPI

25/5/35 (Item 21 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

011624397 \*\*Image available\*\*

WPI Acc No: 1998-041525/ 199804

XRPX Acc No: N98-033323

**Status tracking apparatus for data storage array, e.g. in LAN or telephone interface - has valid status array with status bits having one-to-one correspondence with data storage areas of array**

Patent Assignee: INTEL CORP (ITLC )

Inventor: DYER R W; HARRIMAN D J; SREENIVAS A

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5696768	A	19971209	US 96763963	A	19961210	199804 B

Priority Applications (No Type Date): US 96763963 A 19961210

Patent Details:

Patent No	Kind	Lan	Pg	Main	IPC	Filing	Notes
US 5696768	A		9	G06F-011/00			

Abstract (Basic): US 5696768 A

The status tracking apparatus includes a data storage array (41), e.g a **multiple** element **storage** buffer, with a number of sequential data storage areas (42a-n), each storing a unit of information. Data is written to the array in a random access manner and read in a sequential order. Random access write port management logic (43) is provided for placing data to be read into appropriate **storage** areas in the array and queue management logic (44) **selects** and retrieves the data from the appropriate **storage** area based on a **current** head pointer value which is stored in a register (45).

A valid status array (47) is provided, having a number of status bits, e.g. an n-bit shift register (48a-n). There is a one-to-one correspondence between the bits and the data storage areas. Each status bit indicates whether valid data is contained in the corresponding storage area.

ADVANTAGE - Determines whether valid data exist in storage array area.

Dwg.3/6

Title Terms: STATUS; TRACK; APPARATUS; DATA; STORAGE; ARRAY; LAN; TELEPHONE  
; INTERFACE; VALID; STATUS; ARRAY; STATUS; BIT; ONE; ONE; CORRESPOND;  
DATA; STORAGE; AREA; ARRAY  
Derwent Class: T01; W01  
International Patent Class (Main): G06F-011/00  
File Segment: EPI

25/5/37 (Item 23 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2004 Thomson Derwent. All rts. reserv.

011462289 \*\*Image available\*\*  
WPI Acc No: 1997-440196/ 199741  
XRPX Acc No: N97-366103

Server selection system for client server model - has server selector  
that notifies client of server corresponding to selection policy,  
included in inquiry message, and selected from server information table

Patent Assignee: MITSUBISHI ELECTRIC CORP (MITQ )

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 9198346	A	19970731	JP 965562	A	19960117	199741 B

Priority Applications (No Type Date): JP 965562 A 19960117

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 9198346	A		30	G06F-015/00	

Abstract (Basic): JP 9198346 A

The system selects a server from a number of servers (21-24) offering respective services. A selection policy which is a rule that is followed for selecting a server is stored within an inquiry message (2). A directory server (3) is designated in the inquiry message which is obtained from a client (1). A server information table (4) stores the attribute of each of the servers.

When the selection policy is received with the inquiry message, the servers are evaluated based on their attributes stored in the server information table. The server that corresponds with the selection policy is selected from the server information table. A server selector (6) notifies the client of the selected server.

ADVANTAGE - Corresponds with various server selection requests from each client; extends server selection range since each client can designate number of server selection policies; allows client to change to better server and receive its service; provides server registration unit to notify client of new server that will change old server ; prevents concentrating load in one server ; combines server selection policies from clients for compound selection policy designation.

Dwg.1/20

Title Terms: SERVE; SELECT; SYSTEM; CLIENT; SERVE; MODEL; SERVE; SELECT;  
NOTIFICATION; CLIENT; SERVE; CORRESPOND; SELECT; ENQUIRY; MESSAGE; SELECT  
; SERVE; INFORMATION; TABLE

Derwent Class: T01; W01

International Patent Class (Main): G06F-015/00

International Patent Class (Additional): G06F-013/00

File Segment: EPI

25/5/39 (Item 25 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2004 Thomson Derwent. All rts. reserv.

011175939 \*\*Image available\*\*  
WPI Acc No: 1997-153864/ 199714  
XRPX Acc No: N97-127162

Non-volume-specific data optimal retrieval method for computer storage  
system - involves determining whether selection must be made for

selecting new utility volume is, if so selecting new utility volume from data storage devices based upon weighted load conditions of data storage devices

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC )

Inventor: COHN O; MICKA W F; MOATTI Y; NAGIN K; NOVICK Y; ZEIDNER E

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5606679	A	19970225	US 95396038	A	19950228	199714 B

Priority Applications (No Type Date): US 95396038 A 19950228

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 5606679	A	18	G06F-013/14	

Abstract (Basic): US 5606679 A

The method involves interrogating a session generating a non-specific read request at the host system for a data record. The data record resides on a first data storage device of a number of data storage devices with a first host control block corresponding with the non-specific read request. Whether a selection must be made for selecting a new utility volume is determined. If a new utility volume selection is required, the new utility volume is selected from the data storage devices based upon weighted load conditions of the data storage devices. A second host unit control block corresponds to a second data storage device of the number of data storage devices. The second host unit control block is locked and the non-specific read request transmitted to the storage controller.

ADVANTAGE - Selects non-busy utility volume when servicing non-specific read request.

Dwg.2/6

Title Terms: NON; VOLUME; SPECIFIC; DATA; OPTIMUM; RETRIEVAL; METHOD; COMPUTER; STORAGE; SYSTEM; DETERMINE; SELECT; MUST; MADE; SELECT; NEW; UTILISE; VOLUME; SO; SELECT; NEW; UTILISE; VOLUME; DATA; STORAGE; DEVICE; BASED; WEIGHT; LOAD; CONDITION; DATA; STORAGE; DEVICE

Derwent Class: T01

International Patent Class (Main): G06F-013/14

International Patent Class (Additional): G06F-012/02

File Segment: EPI

33/5/5 (Item 5 from file: 347)  
DIALOG(R)File 347:JAPIO  
(c) 2004 JPO & JAPIO. All rts. reserv.

06029231 \*\*Image available\*\*  
DYNAMIC ACCESS METHOD FOR DATABASE

PUB. NO.: 10-312331 [JP 10312331 A]  
PUBLISHED: November 24, 1998 ( 19981124)  
INVENTOR(s): KAGEI KOJI  
APPLICANT(s): HITACHI LTD [000510] (A Japanese Company or Corporation), JP  
(Japan)  
APPL. NO.: 09-123764 [JP 97123764]  
FILED: May 14, 1997 (19970514)  
INTL CLASS: [6] G06F-012/00 ; G06F-012/00 ; G06F-017/30  
JAPIO CLASS: 45.2 (INFORMATION PROCESSING -- Memory Units); 45.4  
(INFORMATION PROCESSING -- Computer Applications)

#### ABSTRACT

PROBLEM TO BE SOLVED: To efficiently use data which are fresh enough for a processing using a database in a network system which has databases in itself and allows data bases to repeatedly have data that are different in latest update time, but have the same item.

SOLUTION: The system includes a computer 202 which manages the latest update time of data in the respective database, and a table 206 wherein the latest update time of the data in the respective databases is recorded is received from the computer to select databases having data that are fresh enough for a process. A database which can be accessed efficiently is accessed among the selected data - bases .

33/5/6 (Item 6 from file: 347)  
DIALOG(R)File 347:JAPIO  
(c) 2004 JPO & JAPIO. All rts. reserv.

05888535 \*\*Image available\*\*  
SYSTEM AND METHOD FOR MANAGING SOFTWARE RESOURCE IN DISTRIBUTED ENVIRONMENTS

PUB. NO.: 10-171635 [JP 10171635 A]  
PUBLISHED: June 26, 1998 ( 19980626)  
INVENTOR(s): SENBOKU YUJI  
APPLICANT(s): N T T DATA TSUSHIN KK [000000] (A Japanese Company or Corporation), JP (Japan)  
APPL. NO.: 09-268411 [JP 97268411]  
FILED: October 01, 1997 (19971001)  
INTL CLASS: [6] G06F-009/06 ; G06F-009/06 ; G06F-009/445  
JAPIO CLASS: 45.1 (INFORMATION PROCESSING -- Arithmetic Sequence Units)

#### ABSTRACT

PROBLEM TO BE SOLVED: To reduce the load of a network and system manager in the case of distributing software to respective terminals on a network.

SOLUTION: In the case of executing the version up of application for a device 11 to be maintained, a maintenance man's device 1 can compare the file constitutions 5, 9 of a current version and an up- version , select only a file of which updating is required and transmit the selected file to the device 11. When the device 1 transmits the whole files of up-versions , the device 11 mutually compares the file constitutions, 15, 19 of the current version and an up- version and can select and install only a file necessary for updating from the received file . In addition, the device 11 mutually compares the file constitutions 15, 17 of the current version and the preceding version in the table 12 and can return the application of the current version to the preceding version.

File 348:EUROPEAN PATENTS 1978-2004/Aug W03

(c) 2004 European Patent Office

File 349:PCT FULLTEXT 1979-2002/UB=20040826,UT=20040819

(c) 2004 WIPO/Univentio

Set	Items	Description
S1	1486281	STORE OR STORES OR STORAGE OR DEVICE? ? OR SERVER? ? OR DRIVE? ? OR DATABASE? ? OR DATA()BASE? ? OR REPOSITOR??? OR VOLUME? ? OR TAPE OR TAPES OR CASSETTE? ? OR DISK? ? OR DISC? ?
S2	230797	(MULTIPLE OR MULTIPLICITY OR SEVERAL OR PLURAL? OR DUAL??? OR SEPARATE OR DIFFERENT OR VARIOUS OR MIRRORED OR REDUNDANT - OR FARM? ? OR SECOND??? OR 2ND OR TWO OR ARRAY? ? OR PAIR? ? - OR CLUSTER? ?) (2W)S1
S3	272297	STORAGE()AREA()NETWORK? ? OR SAN OR SANS
S4	16594	S1(7N)(RECENT OR CURRENT??? OR LATEST OR LATER OR NEWEST OR NEWER OR NEW OR UP(1W)DATE OR FRESH OR FRESHEST) (7N)(SELECT?- ?? OR CHOOS??? OR CHOSEN? OR PICK???)
S5	192739	S1(7N)(COPY OR COPIES OR DUPLICAT? OR MIRRORED OR REPLIC? OR SAME OR IDENTICAL?)
S6	110083	(UPDAT??? OR CHANG??? OR REVIS??? OR MODIF???? OR MODIFICATION OR VERSION? ?) (5N)(COUNT??? OR LOG? ? OR LOGGING OR HISTOR??? OR FREQUENC??? OR INCIDENCE OR TABLE? ? OR FILE? ? OR LIST????)
S7	41	S2:S3(50N)S4(50N)S5(50N)S6
S8	37	S7 AND AC=US/PR
S9	25	S8 AND AY=(1970:1999)/PR
S10	16	S7 AND PY=1970:1999
S11	28	S9:S10
S12	86	S2:S3(50N)S4(50N)S6
S13	66	S12 NOT S11
S14	50	S13 AND AC=US/PR
S15	19	S14 AND AY=(1970:1999)/PR
S16	22	S13 AND PY=1970:1999
S17	33	S15:S16
S18	122751	(SELECT??? OR CHOOS??? OR CHOSEN? OR PICK???) (5N)S1
S19	882	S18(20N)S6
S20	129	S2:S3(100N)S19
S21	80	S20 AND IC=G06F
S22	62	S21 NOT (S11 OR S17)
S23	54	S22 AND AC=US/PR
S24	24	S23 AND AY=(1970:1999)/PR
S25	23	S21 AND PY=1970:1999
S26	34	S24:S25
S27	2388	S18(50N)S5(50N)S2:S3
S28	796	S27 AND IC=G06F
S29	1360	S2:S3(50N)S4
S30	677	S2:S3(50N)S5(50N)S6
S31	454	S30 AND IC=G06F
S32	26934	(UPDAT??? OR CHANG??? OR REVIS??? OR MODIF???? OR MODIFICATION OR VERSION? ?) (5N)(COUNT??? OR LOG? ? OR LOGGING OR HISTOR???)
S33	164	S2:S3(50N)S5(50N)S32
S34	130	S33 AND IC=G06F
S35	116	S34 NOT (S11 OR S17 OR S26)
S36	97	S35 AND AC=US/PR
S37	54	S36 AND AY=(1970:1999)/PR
S38	35	S35 AND PY=1970:1999
S39	64	S37:S38

26/3,K/2 (Item 2 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2004 European Patent Office. All rts. reserv.

01052722

**SOFTWARE UPDATE MANAGER**

**VERWALTUNGSVORRICHTUNG ZUR SOFTWARE-AKTUALISIERUNG**

**GESTIONNAIRE DE MISE A JOUR DE LOGICIELS**

**PATENT ASSIGNEE:**

Koninklijke Philips Electronics N.V., (200769), Groenewoudseweg 1, 5621  
BA Eindhoven, (NL), (Proprietor designated states: all)

**INVENTOR:**

REHA, Mark, Keith, Prof. Holstlaan 6, NL-5656 AA Eindhoven, (NL)

MORRIS, Charles, Prof. Holstlaan 6, NL-5656 AA Eindhoven, (NL)

**LEGAL REPRESENTATIVE:**

Faessen, Louis Marie Hubertus (19891), INTERNATIONAAL OCTROOIBUREAU B.V.,  
Prof. Holstlaan 6, 5656 AA Eindhoven, (NL)

**PATENT (CC, No, Kind, Date):** EP 951679 A1 991027 (Basic)

EP 951679 B1 030416

WO 99024945 990520

**APPLICATION (CC, No, Date):** EP 98939808 980908; WO 98IB1392 980908

**PRIORITY (CC, No, Date):** US 968020 971112

**DESIGNATED STATES:** DE; FR; GB

**INTERNATIONAL PATENT CLASS:** G06F-013/00

**NOTE:**

No A-document published by EPO

**LANGUAGE (Publication,Procedural,Application):** English; English; English

**FULLTEXT AVAILABILITY:**

Available Text	Language	Update	Word Count
CLAIMS B	(English)	200316	487
CLAIMS B	(German)	200316	475
CLAIMS B	(French)	200316	567
SPEC B	(English)	200316	5234
Total word count - document A			0
Total word count - document B			6763
Total word count - documents A + B			6763

**INTERNATIONAL PATENT CLASS:** G06F-013/00

...SPECIFICATION default URL points to the Philips Semiconductors(TM) MPC  
Web server. This allows software update manager 12 to connect to  
**multiple** software update **servers** 14, although only a single software  
update **server** 14 can be **selected** at a time.

2) Download property page - This page allows a folder to be specified  
where **files** downloaded from software **update** server 14 are placed. The  
download folder can be emptied using an empty button (not shown).

3) Options property page...

26/3,K/5 (Item 5 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2004 European Patent Office. All rts. reserv.

00836571

**Virtual file management system**

**Virtuelles Dateienverwaltungssystem**

**Systeme de gestion de fichiers virtuels**

**PATENT ASSIGNEE:**

MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD., (216885), 1006, Oaza Kadoma,  
Kadoma-shi, Osaka 571, (JP), (applicant designated states:

DE;FR;GB;IT;NL)

**INVENTOR:**

Enoki, Nobuyuki, 2-303, Myokenzaka 6-chome, Katano-shi, Osaka 576, (JP)

Miyazaki, Masaya, 6-14, Asahigaoka 1-chome, Ikeda-shi, Osaka 563, (JP)

**LEGAL REPRESENTATIVE:**

Grunecker, Kinkeldey, Stockmair & Schwanhauser Anwaltssozietat (100721)  
, Maximilianstrasse 58, 80538 Munchen, (DE)

**PATENT (CC, No, Kind, Date):** EP 774723 A2 970521 (Basic)

APPLICATION (CC, No, Date): EP 96118528 961119;  
 PRIORITY (CC, No, Date): JP 95301798 951120; JP 9698775 960419; JP 96255627  
 960927

DESIGNATED STATES: DE; FR; GB; IT; NL  
 INTERNATIONAL PATENT CLASS: **G06F-017/30**  
 ABSTRACT WORD COUNT: 277

LANGUAGE (Publication,Procedural,Application): English; English; English  
 FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPAB97	3657
SPEC A	(English)	EPAB97	17652
Total word count - document A			21309
Total word count - document B			0
Total word count - documents A + B			21309

INTERNATIONAL PATENT CLASS: **G06F-017/30**

...SPECIFICATION which the file identifier list, access request monitoring section, transmitting section, and request processing section are provided in each of **multiple servers**, when a file access request is made to a virtual server from a terminal, the real server where the requested file is managed can by itself respond to the requesting terminal, and thus any of the files stored on the **multiple servers** can be accessed by just issuing an access request to one virtual server from the terminal, without causing workload concentration...

...increasing network workload.

Further, in the configuration of the invention in which the master file identifier list, identifier creation section, **server selection** section, **file** creation section, master **list updating** section, and **list updating** section are added to the configuration of the invention of claim 7, a **server** is automatically **selected** when creating a new file. This configuration not only provides the same effect as achieved by the invention of claim...

...CLAIMS file management apparatus further comprises: an identifier creation section which, when creating a new file in any one of said **plurality** of **servers**, creates for said file a new virtual file identifier not yet existing in said management table; a server selection section...

...stored; a file creation section which acquires a real file identifier corresponding to said new virtual file identifier from the **server selected** by said **server selection** section; and a management table updating section which updates said management table by storing said new virtual file identifier, the **server** name of said **server selected** by said **server selection** section, and said real file identifier as a set in said management table.

4. A virtual file management system constructed with a **plurality** of **servers** and a plurality of terminals that share file services provided by said servers, wherein

a virtual file management apparatus operating in at least one of said **plurality** of **servers** is provided that comprises: a management table which manages files stored on said **plurality** of **servers** by using virtual file identifiers, and in which a server name of a server where real data is stored, a...file management system according to claim 7, capable of supporting the creation of a new file, wherein

one of said **plurality** of **servers** includes: a master file identifier list which manages the file identifiers of files stored on said **plurality** of **servers**; an identifier creation section which creates a new file identifier not yet existing in said master file identifier list; a...

...selects a server where real data of said file is to be stored; a file



creation section which instructs the **server** selected by said **server selection** section to create said file with said file identifier created by said identifier creation section; and a master **list updating** section which adds said **file** identifier to said master file identifier list,

said access request monitoring section is also capable of monitoring a file creation request, and

each of said **plurality** of **servers** further includes a list updating section which updates said file identifiers stored in each server in compliance with an instruction from said file creation section.

9. A virtual file management system comprising a **plurality** of **servers**, a plurality of terminals that share file services provided by said servers, and at least one virtual file management apparatus...

26/3,K/9 (Item 9 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

(c) 2004 European Patent Office. All rts. reserv.

00688529

**System and method for supporting reproduction of full motion video on a plurality of playback platforms.**

**Verfahren und System zur Unterstutzung der Wiedergabe von beweglichen Videobildern auf einer Vielzahl von Wiedergabeplattformen.**

**Systeme et methode pour soutenir la reproduction de videos animees sur plusieurs plates-formes.**

PATENT ASSIGNEE:

International Business Machines Corporation, (200120), Old Orchard Road, Armonk, N.Y. 10504, (US), (applicant designated states: DE;FR;GB)

INVENTOR:

Nusbickel, Wendi Lynn, 908 Iris Drive, Delray Beach, Florida 33483, (US)

LEGAL REPRESENTATIVE:

Burt, Roger James, Dr. (52152), IBM United Kingdom Limited Intellectual Property Department Hursley Park, Winchester Hampshire SO21 2JN, (GB)

PATENT (CC, No, Kind, Date): EP 657801 A1 950614 (Basic)

APPLICATION (CC, No, Date): EP 94308536 941118;

PRIORITY (CC, No, Date): US 159647 931130

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G06F-003/06

ABSTRACT WORD COUNT: 104

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPAB95	599
SPEC A	(English)	EPAB95	3735
Total word count - document A			4334
Total word count - document B			0
Total word count - documents A + B			4334

INTERNATIONAL PATENT CLASS: G06F-003/06

...SPECIFICATION segment, a direct access storage device for retrieval of the video segment is selected from among devices listed in a **drive** information table. The **selected** direct access **storage device** is then instructed to retrieve the video segment. Finally, the drive information **table** is **updated** to reflect use of the **selected** direct access **storage device** for retrieval. As video segments complete, the drive information **table** is also **updated** to reflect freeing of the device.

The present invention will be described further, by way of example only, with reference...

...accompanying drawings, in which:

Figure 1 is a high level block diagram of a data processing network including a redundant **array** of inexpensive **disks** attached to a file

server for the network;

Figure 2 is a high level block diagram of a data processing network including a file server arranged to implement a redundant **array** of inexpensive **disks** on a plurality of direct access storage devices;

Figure 3 is a data structure utilized in supporting allocation of disk...

26/3,K/11 (Item 11 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

(c) 2004 European Patent Office. All rts. reserv.

00314507

Method of operating a computer system for updating programs stored therein.  
Arbeitsverfahren eines Rechnersystems zur Aktualisierung der darin  
gespeicherten Programme.

Procédure d'exploitation d'un système de calculateur pour la mise à jour  
des programmes y étant archivés.

PATENT ASSIGNEE:

International Business Machines Corporation, (200120), Old Orchard Road,  
Armonk, N.Y. 10504, (US), (applicant designated states: DE;FR;GB;IT)

INVENTOR:

Killebrew, Alice June, P O Box 156, Buchanan Dam Texas 78609, (US)

Mann, Charles Franklin, 12016 Ladrido Lane, Austin Texas 78727, (US)

LEGAL REPRESENTATIVE:

Burt, Roger James, Dr. (52152), IBM United Kingdom Limited Intellectual  
Property Department Hursley Park, Winchester Hampshire SO21 2JN, (GB)

PATENT (CC, No, Kind, Date): EP 300710 A2 890125 (Basic)  
EP 300710 A3 911023

APPLICATION (CC, No, Date): EP 88306539 880718;

PRIORITY (CC, No, Date): US 75794 870720

DESIGNATED STATES: DE; FR; GB; IT

INTERNATIONAL PATENT CLASS: G06F-009/44

ABSTRACT WORD COUNT: 203

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	375
SPEC A	(English)	EPABF1	5049
Total word count - document A			5424
Total word count - document B			0
Total word count - documents A + B			5424

INTERNATIONAL PATENT CLASS: G06F-009/44

...CLAIMS files, on said display screen.

3. A method according to claim 2, further comprising the steps of:  
selectively identifying a **second** target drive and directory  
in response to the display of said first target drive and directory,  
and storing said stored program at a location referenced by said  
second target **drive** and directory identification; and  
selectively identifying a **second** source **drive** and  
directory, and storing said **update files** at a location referenced  
by said **second** source **drive** and directory identification;  
whereby, when the **second drives** and directories are  
**selected** and the program and **update files** are stored therein,  
the program stored therein is updated by **update** data from the  
**update files** stored therein.
4. A method according to any one of the previous claims including the  
further step of:  
determining a...

26/3,K/13 (Item 13 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

(c) 2004 European Patent Office. All rts. reserv.

00266141

**File backup facility for a community of personal computers.**

**Dateisicherungseinrichtung fur eine Gemeinschaft von Personalcomputern.**

**Amenagement de sauvegarde de fichier pour une communaute d'ordinateurs personnels.**

PATENT ASSIGNEE:

Hewlett-Packard Limited, (402421), Nine Mile Ride, Wokingham, Berkshire  
RG11 3LL, (GB), (applicant designated states: DE;FR;GB)

INVENTOR:

Bartlett, Paul, 28 Monk Road, Bishopton Bristol BS7 8LE, (GB)  
Lieske, Steven, 24 Cedar Hall, Frenchay Bristol, (GB)  
Simms, Mark, 30 Codrington Road, Bishopston Bristol BS7 8ET, (GB)  
Hains, Tracey, 9 Seyton Walk, Stoke Gifford Bristol BS12 6UW, (GB)  
Walker, Patrick, 4 Manor Close, Tockington Bristol BS12 4NT, (GB)  
Winsborrow, Lesley, 3 Adringal Cottages Horton, Chipping Sodbury Bristol  
BS17 6QP, (GB)

LEGAL REPRESENTATIVE:

Squibbs, Robert Francis (36273), Hewlett-Packard Limited Cain Road,  
Bracknell, Berkshire RG12 1HN, (GB)

PATENT (CC, No, Kind, Date): EP 259912 A1 880316 (Basic)  
EP 259912 B1 911016

APPLICATION (CC, No, Date): EP 87201556 870818;

PRIORITY (CC, No, Date): GB 8622010 860912

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: **G06F-011/14**

ABSTRACT WORD COUNT: 122

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	941
CLAIMS B	(German)	EPBBF1	933
CLAIMS B	(French)	EPBBF1	1085
SPEC B	(English)	EPBBF1	12929
Total word count - document A			0
Total word count - document B			15888
Total word count - documents A + B			15888

INTERNATIONAL PATENT CLASS: **G06F-011/14**

...SPECIFICATION device of the mainframe.

The document DIGEST OF PAPERS OF THE SPRING COMPCON 85, 30th IEEE  
COMPUTER SOCIETY INTERNATIONAL CONFERENCE, **San** Francisco, 25th-28th  
February 1985, pages 144-147, IEEE, US; B. EISENHARD: "Network disk and  
file servers" relates to personal...

...translation of the video data stream, and the second processor reads or  
writes data over the network to a target **disk server**.

**It** is an object of the present invention to **provide** a backup  
facility **for** a community of personal computers which is both convenient  
to use and relatively inexpensive.

According to the present invention, there...

...files for backup and to transmit the selected files to the central  
station, and

- b) in a restore mode, to **enable** user-selection of files to be  
restored from backup, to request and receive the files selected for  
restore from the...directory being accessible to a user to facilitate the  
selection of files for restore.

In order to avoid backing up **files** which have not been **changed**  
since **they** were **last** backed up, the backup directory is arranged to  
**store file version** data. If backup of the same **file** is  
subsequently requested, this **version** data is used to **check** whether  
**any changes** have been made to **the file** since its last backup.

BRIEF DESCRIPTION OF THE DRAWINGS

A file backup facility embodying the invention and for use in...

26/3,K/15 (Item 1 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2004 WIPO/Univentio. All rts. reserv.

00807342 \*\*Image available\*\*

**SYSTEM AND METHOD FOR ENHANCING OPERATION OF A WEB SERVER CLUSTER**  
**SYSTEME ET PROCEDE DESTINES A AMELIORER LE FONCTIONNEMENT D'UN GROUPE DE**  
**SERVEURS WEB**

Patent Applicant/Assignee:

WARP SOLUTIONS INC, 12th Floor, 627 Greenwich St., New York, NY 10014, US  
, US (Residence), US (Nationality)

Inventor(s):

PRIMAK Leonard, 284 Mott Street #20, New York, NY 10020, US,  
GNIP John, 62-42 Woodhaven Blvd., Rego Park, NY 11374, US,  
VOLOVICH Gene R, 176 1/2 Hamilton Avenue, Greenwich, CT 06830, US,

Legal Representative:

IM C Andrew (agent), Fulbright & Jaworski L.L.P., 666 Fifth Avenue, New  
York, NY 10103, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200140903 A2-A3 20010607 (WO 0140903)  
Application: WO 2000US42480 20001201 (PCT/WO US0042480)  
Priority Application: US 99169196 19991206; US 2000201810 20000504; US  
2000565259 20000505; US 2000202329 20000505

Designated States:

(Protection type is "patent" unless otherwise stated -- for applications  
prior to 2004)

AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB  
GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA  
MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA  
UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 6822

Main International Patent Class: G06F-013/00

Fulltext Availability:

Claims

Claim

... server is operable to read records corresponding to said requested  
content for each server in said destination group from said **update**  
**table** and **select** said **second server** in said destination group with  
the highest version value for said requested content. 3o 24. The system  
of claim 22...

...server in said destination group to provide unavailable servers and to  
inhibit the  
selection of said unavailable servers as said **second server** .

25 A method for balancing connection load among servers in a  
heterogeneous server cluster, comprising the steps of determining by each  
...

26/3,K/19 (Item 5 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2004 WIPO/Univentio. All rts. reserv.

00764221 \*\*Image available\*\*

**DYNAMIC PERFORMANCE BASED SERVER SELECTION**  
**SELECTION DYNAMIQUE D'UN SERVEUR SUR LA BASE DE LA PERFORMANCE**

Patent Applicant/Assignee:

GATEWAY INC, 610 Gateway Drive, P.O. Box 2000, North Sioux City, SD  
57049-2000, US, US (Residence), US (Nationality)

Inventor(s):

YOUNG Bruce A, 1024 14th Avenue SE, LeMars, IA 51031, US

Legal Representative:

VIKSNINS Ann S, Schwegman, Lundberg, Woessner & Kluth, P.O. Box 2938,  
Minneapolis, MN 55402, US

Patent and Priority Information (Country, Number, Date):

Patent: WO 200077637 A1 20001221 (WO 0077637)

Application: WO 2000US40106 20000606 (PCT/WO US0040106)

Priority Application: US 99329620 19990610

Designated States:

(Protection type is "patent" unless otherwise stated - for applications  
prior to 2004)

AU CA JP

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

Publication Language: English

Filing Language: English

Fulltext Word Count: 4927

Main International Patent Class: G06F-009/46

Fulltext Availability:

Detailed Description

Detailed Description

... completed delivering the first portion of the file, a reconnect  
internet protocol-(IP) command-is-used-to-indicate-to-the **second**  
**server** that a file transfer was interrupted. With some well known  
handshaking, a starting address is provided to the **second server** , and  
a second portion of the file is transferred from the **second server** .  
Throughput of this transfer is also tracked and the rest of the servers  
are contacted in the same manner to...

...as measured by throughput is ranked, and the rest of the file is  
requested at 235 from the highest throughput **server** which is **selected**  
as the optimal **server** .

The throughput may further be monitored at 240 from the optimal server.  
This is done because performance may **change** over time for very large  
**files** . If the performance falls below a desired rate at 245, a  
**different server** may be **selected** . Either the next **server** on the  
previously generated performance ranked list may be selected for  
continuation of the transmission, or the performance of...

26/3,K/21 (Item 7 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

(c) 2004 WIPO/Univentio. All rts. reserv.

00551567 \*\*Image available\*\*

SYSTEM FOR RESPONDING TO A RESOURCE REQUEST

SYSTEME PERMETTANT DE REPONDRE A UNE DEMANDE DE RESSOURCES

Patent Applicant/Assignee:

SUN MICROSYSTEMS INC,

Inventor(s):

JINDAL Anita,

LIM Swee Boon,

RADIA Sanjay,

CHANG Whei-Ling,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200014940 A1 20000316 (WO 0014940)

Application: WO 99US19938 19990830 (PCT/WO US9919938)

Priority Application: US 98146771 19980903

Designated States:

(Protection type is "patent" unless otherwise stated - for applications  
prior to 2004)

AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM  
HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX  
NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW GH GM  
KE LS MW SD SL SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES

FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN  
TD TG

Publication Language: English  
Fulltext Word Count: 8059

International Patent Class: **G06F-009/46**  
Fulltext Availability:  
Detailed Description

#### Detailed Description

... the least-loaded) or the server closest to DNS server 100.  
Illustratively, RMO 204 maintains a data structure (e.g., **array**,  
vector, table, **database**) identifying each server and/or instance of the  
application that is being loadbalanced, along with one or more values or  
other indicators or summaries of the collected information concerning  
each instance of the application. Alternatively, **multiple** preferred  
**servers** may be selected for different load balancing policies, in order  
to allow rapid satisfaction of client requests specifying different  
criteria.

Finally, in the illustrated embodiment DNS **updater** object 206 **updates**  
data **file** 104 after the collected information is analyzed and a  
preferred **server** is **selected**. Again, the data stored in data file 104  
may comprise the information collected from the application instances  
(and/or host...

26/3,K/22 (Item 8 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2004 WIPO/Univentio. All rts. reserv.

00551261 \*\*Image available\*\*

#### LOAD BALANCING FOR REPLICATED SERVICES EQUILIBRAGE DE CHARGE POUR SERVICES DUPLIQUES

Patent Applicant/Assignee:

SUN MICROSYSTEMS INC,

Inventor(s):

JINDAL Anita,  
LIM Swee Boon,  
RADIA Sanjay,  
CHANG Whei-Ling,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200014634 A1 20000316 (WO 0014634)  
Application: WO 99US19877 19990830 (PCT/WO US9919877)  
Priority Application: US 98146848 19980903

Designated States:

(Protection type is "patent" unless otherwise stated - for applications  
prior to 2004)

AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM  
HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX  
NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW GH GM  
KE LS MW SD SL SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES  
FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN  
TD TG

Publication Language: English  
Fulltext Word Count: 8719

Main International Patent Class: **G06F-009/46**  
Fulltext Availability:  
Detailed Description

#### Detailed Description

... least-loaded server) or the one closest to nameserver I 00.  
Illustratively, RMO 204 maintains a data structure (e.g., **array**,  
vector, table, **database**) identifying each server and/or instance of the  
replicated service that is being load-balanced, along with one or more...  
...or service instance).

Finally, in the illustrated embodiment DNS updater object 206 gathers and analyzes data from RMO 204 and **updates** zone **file** 104 after the collected information is analyzed and a preferred **server** is **selected**. In this embodiment, RMO 204 retrieves the collected data and DNS **updater** 206 **updates** the zone **file** on a periodic basis. Illustratively, if the selected 1 5 policy specifies the use of the closest server, RMO 204 ...

26/3,K/23 (Item 9 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2004 WIPO/Univentio. All rts. reserv.

00551260 \*\*Image available\*\*

**LOAD BALANCING IN A NETWORK ENVIRONMENT**

**EQUILIBRAGE DE CHARGE DANS UN ENVIRONNEMENT DE RESEAU**

Patent Applicant/Assignee:

SUN MICROSYSTEMS INC,

Inventor(s):

JINDAL Anita,

LIM Swee Boon,

RADIA Sanjay,

CHANG Whei-Ling,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200014633 A1 20000316 (WO 0014633)

Application: WO 99US19875 19990830 (PCT/WO US9919875)

Priority Application: US 98146772 19980903

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM  
HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX  
NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW GH GM  
KE LS MW SD SL SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES  
FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN  
TD TG

Publication Language: English

Fulltext Word Count: 10242

Main International Patent Class: G06F-009/46

Fulltext Availability:

Detailed Description

Detailed Description

... fewest pending client requests, the greatest capacity for client requests, etc. Illustratively, RMO 220 maintains a data structure (e.g., **array**, vector, table, **database**) identifying each application instance and/or server that is being load-balanced, along with one or more values or other indicators or summaries of the collected information concerning each application instance.

Finally, **updater** object 230 **updates** lookup **table** 102 after the collected information is analyzed and a preferred **server** is **selected**. Illustratively, one updater object is used to **update** the lookup **table** for all applications being load-balanced. However, in an alternative embodiment of the invention separate updater objects may be employed...

26/3,K/24 (Item 10 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2004 WIPO/Univentio. All rts. reserv.

00543731 \*\*Image available\*\*

**FILE SYSTEM IMAGE TRANSFER**

**TRANSFERT D'IMAGES DANS UN SYSTEME DE FICHIERS**

Patent Applicant/Assignee:

NETWORK APPLIANCE INC,

Inventor(s):

HITZ David,

KLEIMAN Steven,

HARRIS Guy,

O'MALLEY Sean,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200007104 A1 20000210 (WO 0007104)

Application: WO 99US17148 19990728 (PCT/WO US9917148)

Priority Application: US 98127497 19980731

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

CA CN JP KR AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

Publication Language: English

Fulltext Word Count: 17739

Main International Patent Class: G06F-011/14

Fulltext Availability:

Claims

Claim

1 A file system, having a **plurality** of **storage** blocks, and including a plurality of bits associated with each one of said **plurality** of **storage** blocks, at least one of said plurality of bits identifying whether said one storage block was part of said file...

...said one storage block was part of said file system at a second time earlier than a current consistent **version** of said **file** system

3 A file system as in claim 2, including an element disposed for **selecting storage** blocks in response to said one bit and said second one bit associated with said selected storage blocks.  
1 5...to an operation on at least two of said snapshots.

53 An incremental mirror of a file system having a **plurality** of **storage** blocks, said incremental mirror including a first set of first member **storage** blocks **selected** from said plurality. said first member storage blocks forming a copy of a first consistent **version** of said **file** system; and a second set of **second** member **storage** blocks **selected** from said plurality, 1 5 said **second** member **storage** blocks being responsive to said first consistent version and to a second consistent version of said file system, said second...

...consistent version;  
said first set being stored in a first storage medium, and said second set being stored in a **second storage** medium of substantially different type; whereby a complete copy of said file system can be constructed from said first set...plurality of storage blocks. said incremental mirror includin

9

49

AMENDED SHEET (ARTICLE 19)

a first set of first member **storage** blocks **selected** from said plurality,

said first member storage blocks forming a copy of a first consistent **version** of said

**file** system; and

a second set of **second** member **storage** blocks **selected** from said plurality, said **second** member **storage** blocks being responsive to said first consistent version and to a second consistent version of said file system, said second...



...version;  
said first set being stored in a first storage medium, and said second  
io set being stored in a **second storage** medium of substantially  
different type;  
whereby a complete copy of said file system can be constructed from  
said first set...

26/3,K/25 (Item 11 from file: 349)  
DIALOG(R) File 349:PCT FULLTEXT  
(c) 2004 WIPO/Univentio. All rts. reserv.

00493593 \*\*Image available\*\*

**SOFTWARE UPDATE MANAGER**

**GESTIONNAIRE DE MISE A JOUR DE LOGICIELS**

Patent Applicant/Assignee:

KONINKLIJKE PHILIPS ELECTRONICS N V,  
PHILIPS AB,

Inventor(s):

REHA Mark Keith,  
MORRIS Charles,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9924945 A1 **19990520**

Application: WO 98IB1392 19980908 (PCT/WO IB9801392)

Priority Application: US 97968020 19971112

Designated States:

(Protection type is "patent" unless otherwise stated - for applications  
prior to 2004)

JP KR AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

Publication Language: English

Fulltext Word Count: 5903

Patent and Priority Information (Country, Number, Date):

Patent: ... **19990520**

International Patent Class: **G06F-013/00** ...

... **G06F-015/177**

Fulltext Availability:

Detailed Description

Publication Year: **1999**

Detailed Description

... default URL points to the Philips Semiconductors TM MPC Web server.  
This allows software update manager 12 to connect to **multiple** software  
update **servers** 14, although only a single software update **server** 14  
can be **selected** at a time.

2) Download property page - This page allows a folder to be specified  
where **files** downloaded from software **update** server 14 are placed. The  
download folder can be emptied using an empty button (not shown).

1 5 3) Options...

26/3,K/27 (Item 13 from file: 349)  
DIALOG(R) File 349:PCT FULLTEXT  
(c) 2004 WIPO/Univentio. All rts. reserv.

00484605 \*\*Image available\*\*

**DYNAMIC MIRROR SERVICE POLICY**

**POLITIQUE DYNAMIQUE EN MATIERE DE SERVICE MIROIR**

Patent Applicant/Assignee:

EMC CORPORATION,

Inventor(s):

MASON Robert S Jr,  
OFEK Yuval,  
VISHLITZKY Natan,

ARNON Dan,  
BACHMAT Eitan,  
Patent and Priority Information (Country, Number, Date):  
Patent: WO 9915957 A1 **19990401**  
Application: WO 98US19725 19980921 (PCT/WO US9819725)  
Priority Application: US 97936122 19970924  
Designated States:  
(Protection type is "patent" unless otherwise stated - for applications prior to 2004)  
JP KR AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE  
Publication Language: English  
Fulltext Word Count: 6111  
Patent and Priority Information (Country, Number, Date):  
Patent: ... **19990401**  
Main International Patent Class: **G06F-009/00**  
International Patent Class: **G06F-013/00** ...

... **G06F-012/00**  
Fulltext Availability:  
Detailed Description  
Publication Year: **1999**

#### Detailed Description

... two  
comparison numbers for the decision about which physical device is preferred (between the two which can be chosen). The **two device** (and port) interface levels are illustrated in Figs. 5F and 5G.

After determining these two levels, the DMSP-PREFERRED-DEV will be **selected** as **device 0300** since it has a lower activity level. The DMSP - DA-ACT-LVL and DMSP PHYS-ACT-LVL **tables** will be **updated** using the activity for this logical device as illustrated in Figs.

5H and 5I.

Now the next device (Logical Volume...

...Logical Volume 6) is now  
5processed as illustrated in Figs. 5L and 5M. After determining the activity levels for these **two devices**, the DMSP PREFERRED DEV will be **selected** as **device 0210** since it has a lower activity level. The DMSP-DA-ACT-LVL and DMSP PHYS-ACT-LVL **tables** are **updated** using the 10 activity for this logical device as illustrated in Figs.

SN and 5P.

Now, the next device (Logical...

...results are illustrated in Figs. 5Q and 5R. After 15 determining these two levels, the DMSP -PREFERRED-DEV will be **selected** as **device 0202** since it has a lower activity level. The DMSP-DA-ACT-LVL and DMSP-PHYS-ACT-LVL **tables** will be **updated**, using the activity for this logical device, as illustrated in Figs. 5S and 5T.

Now, the next device (Logical Volume...

...results are illustrated in Figs. 5U and 5V. After determining these two activity levels, the DMSP- PREFERRED-DEV will be **selected** as device 0311 since 25 it has the lower activity level. The DMSP -DA-ACT-LVL and DMSP- PHYS- ACT...activity levels are determined as described above. The results are illustrated in Figs.

5Y and 5Z. After determining these two **device** activity levels, the DMSP-PREFERRED-DEV will be selected as device 0201 since it has a lower activity level. The 35 DMSP-DA-ACT-LVL and DMSP-PHYS-ACT-LVL tables are then  
- 16

**updated** using the activity for this logical device, as illustrated in Figs. 5AA and 5AB.

Now the next device (Logical Volume...

...determined

5 as illustrated in Figs. AC and AD. After determining these two levels, the DMSP-PREFERRED-DEV will be **selected** as **device** 0300 since it has the lower activity level.

The DMSP-DA-ACT-LVL and DMSP-PHYS-ACT-LVL **tables** are again **updated** using the activity levels for this logical device, as illustrated in Figs. 5AE and 5AF.

Now the next device (Logical...

...processed and the device activity levels are determined.

The results are illustrated in Figs. 5AG and 5AH. After determining these **two device** activity levels, the DMSP-PREFERRED-DEV is **selected** as **device** 0310 since it has a lower activity level. The DMSP-DA-ACT-LVL and DMSP-PHYS-ACT-LVL **tables** are now **updated** using the activity levels for this logical device, as illustrated in Figs. 5AI and 5AJ.

Now the next device (Logical...

...levels are determined as

illustrated in Fig. 5AK and 5AL. After determining these two levels, the DMSP-PREFERRED-DEV is **selected** as **device** 0301 since it has the lower activity level. The DMSP-DA-ACT-LVL and DMSP-PHYS-ACT-LVL **tables** are **updated** using the activity levels for this logical device, as illustrated in Figs. 5AM and 5AN.

Now the final device (Logical...

26/3,K/28 (Item 14 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

(c) 2004 WIPO/Univentio. All rts. reserv.

00474240 \*\*Image available\*\*

**A METHOD FOR DETERMINING ALLOCATABILITY OF TAPE DRIVES TO SERVE REQUESTS TO STORE INFORMATION**

**METHODE PERMETTANT DE DETERMINER LES DISPONIBILITES EN MATIERE D'ATTRIBUTION D'ENTRAINEURS DE BANDE DESTINES A UNE PRISE EN CHARGE DE REQUETES A DES FINS DE MEMORISATION D'INFORMATION**

Patent Applicant/Assignee:

STORAGE TECHNOLOGY CORPORATION,

Inventor(s):

WEISSMANN Paul Thomas,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9905592 A1 19990204

Application: WO 98US13104 19980624 (PCT/WO US9813104)

Priority Application: US 97900460 19970725

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

JP AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

Publication Language: English

Fulltext Word Count: 6174

Patent and Priority Information (Country, Number, Date):

Patent: ... 19990204

Main International Patent Class: G06F-003/06  
International Patent Class: G06F-009/46  
Fulltext Availability:  
Detailed Description  
Publication Year: 1999

Detailed Description

... to a memory management system. More particularly, the present invention relates to a method of testing to determine if the **tape drives** can be **selected** from the **modified lists** so that a **different tape drive** concurrently serves each request.

PROBLEM

A memory management system includes a memory controller and a **plurality** of **tape drives**. At least one processor is connected to the memory management system. Each connected processor may transmit a request for a ...;

26/3,K/31 (Item 17 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2004 WIPO/Univentio. All rts. reserv.

00343975 \*\*Image available\*\*  
**METHOD FOR MANIPULATING DISK PARTITIONS**  
**PROCEDE DE MANIPULATION DE PARTITIONS DE DISQUES**

Patent Applicant/Assignee:

POWERQUEST CORPORATION,

Inventor(s):

RUFF Eric J,  
RAYMOND Robert S,  
LLEWELYN Scott,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9626487 A1 19960829  
Application: WO 96US2152 19960212 (PCT/WO US9602152)  
Priority Application: US 95393805 19950223; US 95554828 19951107

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AU DE DK GB JP AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE

Publication Language: English

Fulltext Word Count: 26729

Patent and Priority Information (Country, Number, Date):

Patent: ... 19960829

Main International Patent Class: G06F-012/02

International Patent Class: G06F-12:06

Fulltext Availability:

Detailed Description

Publication Year: 1996

Detailed Description

... as taught herein on partitions containing any of a variety of familiar file systems, including without limitation HPFS and FAT **file** systems.

If the **modified** partition contains entirely **different disk** sectors than the **selected** partition and the **selected** partition remains intact on the **disk 2** after the modified partition is made containing a copy of the selected partition's user data, then the selected...the capability of moving and copying partitions from a first disk ("source disk") attached to one disk drive to a **second disk** ("target **disk** ") attached to a **different disk drive**. In this event, it is preferred that the source disk and the target disk each have the same number of...

...requirements of the file system (if any), and if corresponding

changes can be made in the boot sector and other **file** system structures of the **modified** partition, During a creating step 312, a first list or map is created of all **disk** sectors inside the **selected** partition that are marked as bad or unusable by the selected partition's file system. During a testing step 314...

26/3,K/32 (Item 18 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

(c) 2004 WIPO/Univentio. All rts. reserv.

00296122

**METHOD AND SYSTEM FOR TRACKING CHANGED FILES**

**PROCEDE ET SYSTEME POUR ASSURER LE SUIVI DE FICHIERS MODIFIES**

Patent Applicant/Assignee:

ZBIKOWSKI Mark,  
BERKOWITZ Brian T,  
FERGUSON Robert I,

Inventor(s):

ZBIKOWSKI Mark,  
BERKOWITZ Brian T,  
FERGUSON Robert I,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9514273 A1 **19950526**  
Application: WO 94US13347 19941118 (PCT/WO US9413347)  
Priority Application: US 93154582 19931118

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

CA JP AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE

Publication Language: English

Fulltext Word Count: 8069

Patent and Priority Information (Country, Number, Date):

Patent: ... **19950526**

Main International Patent Class: **G06F-011/14**

Fulltext Availability:

Claims

Publication Year: **1995**

**Claim**

1 A computer implemented method of restoring data lost from a first storage, the computer including a **second storage** for storing a plurality of files, each file including associated file identifying information which identifies the file, the computer including...

...the other files; storing identifying information for files to be processed by the computer in a portion of the first **storage** ;  
**selecting** a next file to be processed by examining the identifying information and **update** sequence value of **files** to be processed that are stored in the portion of the first storage;  
processing the next file to be processed...storing the update sequence value in the selected file;  
storing the selected file with the update sequence value in a **second storage**, the **second storage** being arranged such that when the first storage loses data, the **second storage** does not lose data;  
storing the file identifier identifying the **selected** file in the first **storage** ; processing by the processor at least one of the files listed in the first storage;  
determining a largest processed **update** sequence value from the **files** that have been processed by the computer;  
in response to a loss of the file identifiers stored in the first...

...order in which

the selected file will be processed relative to the other files;  
storing the identifying information and the **update** sequence value of  
the

**selected file** in a **second storage**, the second storage being  
arranged such that when the

Z@ :D

first storage loses data, the **second storage** does not lose data;  
processing by the processor at least one of the files listed in the first  
storage;

...of the selected file surpasses

the most extreme processed update sequence value; and

in response to a determination that the **update** sequence value of the  
selected **file** surpasses the most extreme processed **update** sequence  
value, storing in the first **storage** the file identifier of the  
**selected file**.

9 The method of claim 8, further including the steps of  
providing an upper limit value which indicates a...

26/3,K/33 (Item 19 from file: 349)

DIALOG(R) File 349:PCT FULLTEXT

(c) 2004 WIPO/Univentio. All rts. reserv.

00225628 ---\*\*Image-available\*\*---

**METHOD AND SYSTEM FOR REVISING DATA IN A DISTRIBUTED DATA COMMUNICATION  
SYSTEM**

**PROCEDE ET SYSTEME DE MISE A JOUR DE DONNEES DANS UN SYSTEME DE  
COMMUNICATION DE DONNEES REPARTIES**

Patent Applicant/Assignee:

ICL DATA AB,

STRoMBERG Fredrik,

Inventor(s):

STRoMBERG Fredrik,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9222870 A1 19921223

Application: WO 92SE411 19920612 (PCT/WO SE9200411)

Priority Application: SE 911795 19910612; SE 911796 19910612; SE 92604  
19920228

Designated States:

(Protection type is "patent" unless otherwise stated - for applications  
prior to 2004)

AT AU BE CA CH DE DK ES FI FR GB GR IT JP LU MC NL NO SE US

Publication Language: English

Fulltext Word Count: 13780

Patent and Priority Information (Country, Number, Date):

Patent: ... 19921223

Main International Patent Class: G06F-015/16

**English Abstract**

...distributed data communication system, e.g. such data as a data  
program or document intended for a number of a **plurality** of destination  
**devices** (AEI, AEII, LSE2, LSE3) in the data communication system  
individually selected by an administrator, in which each destination  
device includes...

...least one memory unit (ME, LSM2, LSM3) for individual storage of data.

The revision involves, for instance, installing and/or **changing** the  
selected data, a) a **list** of the **selected** destination **devices** is  
established; b) a procedure for the revision of the data on the **selected**  
destination **devices** is established and the procedures (L2; C2) are  
stored as a revision recipe; c) there is created a data package...

Publication Year: 1992

39/3,K/2 (Item 2 from file: 348)  
DIALOG(R) File 348:EUROPEAN PATENTS  
(c) 2004 European Patent Office. All rts. reserv.

01386371

**Managing a resource used by a plurality of nodes**

**Verwaltung eines durch eine Mehrzahl von Knoten benutzten Betriebsmittels**

**Gestion d'une ressource utilisee par une pluralite de noeuds**

PATENT ASSIGNEE:

ORACLE CORPORATION, (1640220), 500 Oracle Parkway, Redwood Shores, CA  
94065, (US), (Proprietor designated states: all)

INVENTOR:

Bamford, Roger J., 2430 Hyde Street, San Francisco, CA 94109, (US)

Klots, Boris, 1566 Winding Way, Belmont, CA 94002, (US)

LEGAL REPRESENTATIVE:

Viering, Jentschura & Partner (100645), Postfach 22 14 43, 80504 Munchen,  
(DE)

PATENT (CC, No, Kind, Date): EP 1176510 A2 020130 (Basic)

EP 1176510 A3 020925

EP 1176510 B1 040630

APPLICATION (CC, No, Date): EP 2001119238 990212;

PRIORITY (CC, No, Date): US 74587 P 980213; US 199120 981124

DESIGNATED STATES: DE; FR; GB; NL

RELATED PARENT NUMBER(S) - PN (AN):

EP 1055173 (EP 99906927)

RELATED DIVISIONAL NUMBER(S) - PN (AN):

EP 1408408 (EP 2003015396)

INTERNATIONAL PATENT CLASS: G06F-011/14 ; G06F-009/46 ; G06F-012/08

ABSTRACT WORD COUNT: 149

NOTE:

Figure number on first page: 6

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200205	4063
CLAIMS B	(English)	200427	3165
CLAIMS B	(German)	200427	3175
CLAIMS B	(French)	200427	2945
SPEC A	(English)	200205	7570
SPEC B	(English)	200427	7650
Total word count - document A			11635
Total word count - document B			16935
Total word count - documents A + B			28570

INTERNATIONAL PATENT CLASS: G06F-011/14 ...

... G06F-009/46 ...

... G06F-012/08

...SPECIFICATION in cache, thus reconstructing the current version in the  
cache of the database server that holds the latest PI version.

#### **MULTIPLE DATABASE SERVER FAILURE**

In case of a **multiple server** failure, when neither the latest PI  
**copy** nor any CURR copy have survived, it may happen that the changes  
made to the resource are spread over multiple...

...not to the size of the total configuration.

In systems where it is possible to determine which failed database  
servers **updated** the resource, only the **logs** of the failed database  
servers that updated the resource need to be merged and applied.  
Similarly, in systems where it is possible to determine which failed  
database servers updated the resource subsequent to the durably stored  
**version** of the resource, only the **logs** of the failed database servers  
that updated the resource subsequent to the durably stored version of the  
resource need to...

...resource transfers shall be described with reference to Figure 1. During

the series of transfers, a resource is accessed at **multiple database servers** . Specifically, the resource is shipped along a cluster nodes for modifications, and then a checkpoint at one of the database...

...SPECIFICATION in cache, thus reconstructing the current version in the cache of the database server that holds the latest PI version.

#### **MULTIPLE DATABASE SERVER FAILURE**

In case of a **multiple server** failure, when neither the latest PI **copy** nor any CURR copy have survived, it may happen that the changes made to the resource are spread over multiple...

...not to the size of the total configuration.

In systems where it is possible to determine which failed database servers **updated** the resource, only the **logs** of the failed database servers that updated the resource need to be merged and applied. Similarly, in systems where it is possible to determine which failed database servers updated the resource subsequent to the durably stored **version** of the resource, only the **logs** of the failed database servers that updated the resource subsequent to the durably stored version of the resource need to...

...resource transfers shall be described with reference to Figure 1. During the series of transfers, a resource is accessed at **multiple database servers** . Specifically, the resource is shipped along a cluster nodes for modifications, and then a checkpoint at one of the database...

39/3,K/3 (Item 3 from file: 348)

DIALOG(R) File 348:EUROPEAN PATENTS

(c) 2004 European Patent Office. All rts. reserv.

01386370

#### **Managing recovery of data after failure of one or more caches**

Datenrückgewinnungsverwaltung nach Ausfall von einem oder mehreren Caches

Gestion de recuperation de donnees apres une panne d'une ou plusieurs antememoires

PATENT ASSIGNEE:

ORACLE CORPORATION, (1640220), 500 Oracle Parkway, Redwood Shores, CA 94065, (US), (Proprietor designated states: all)

INVENTOR:

Bamford, Roger J., 2430 Hyde Street, San Francisco, CA 94109, (US)  
Klots, Boris, 1566 Winding Way, Belmont, CA 94002, (US)

LEGAL REPRESENTATIVE:

Viering, Jentschura & Partner (100645), Postfach 22 14 43, 80504 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 1176509 A2 020130 (Basic)  
EP 1176509 A3 020925  
EP 1176509 B1 040512

APPLICATION (CC, No, Date): EP 2001119227 990212;

PRIORITY (CC, No, Date): US 74587 P 980213; US 199120 981124

DESIGNATED STATES: DE; FR; GB; NL

RELATED PARENT NUMBER(S) - PN (AN):

EP 1055173 (EP 99906927)

INTERNATIONAL PATENT CLASS: G06F-011/14 ; G06F-011/20

ABSTRACT WORD COUNT: 149

NOTE:

Figure number on first page: 6

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200205	1354
CLAIMS B	(English)	200420	921
CLAIMS B	(German)	200420	854
CLAIMS B	(French)	200420	1113
SPEC A	(English)	200205	7570
SPEC B	(English)	200420	7544



Total word count - document A 8926  
Total word count - document B 10432  
Total word count - documents A + B 19358

INTERNATIONAL PATENT CLASS: G06F-011/14 ...

... G06F-011/20

...SPECIFICATION in cache, thus reconstructing the current version in the cache of the database server that holds the latest PI version.

#### **MULTIPLE DATABASE SERVER FAILURE**

In case of a **multiple server** failure, when neither the latest PI **copy** nor any CURR copy have survived, it may happen that the changes made to the resource are spread over multiple...

...not to the size of the total configuration.

In systems where it is possible to determine which failed database servers **updated** the resource, only the **logs** of the failed database servers that updated the resource need to be merged and applied. Similarly, in systems where it is possible to determine which failed database servers updated the resource subsequent to the durably stored **version** of the resource, only the **logs** of the failed database servers that updated the resource subsequent to the durably stored version of the resource need to...

...resource transfers shall be described with reference to Figure 1. During the series of transfers, a resource is accessed at **multiple database servers**. Specifically, the resource is shipped along a cluster nodes for modifications, and then a checkpoint at one of the database...

...SPECIFICATION in cache, thus reconstructing the current version in the cache of the database server that holds the latest PI version.

#### **MULTIPLE DATABASE SERVER FAILURE**

In case of a **multiple server** failure, when neither the latest PI **copy** nor any CURR copy have survived, it may happen that the ...not to the size of the total configuration.

In systems where it is possible to determine which failed database servers **updated** the resource, only the **logs** of the failed database servers that updated the resource need to be merged and applied. Similarly, in systems where it is possible to determine which failed database servers updated the resource subsequent to the durably stored **version** of the resource, only the **logs** of the failed database servers that updated the resource subsequent to the durably stored version of the resource need to...

...resource transfers shall be described with reference to Figure 1. During the series of transfers, a resource is accessed at **multiple database servers**. Specifically, the resource is shipped along a cluster nodes for modifications, and then a checkpoint at one of the database...

39/3,K/5 (Item 5 from file: 348)  
DIALOG(R) File 348:EUROPEAN PATENTS  
(c) 2004 European Patent Office. All rts. reserv.

01364745

Transferring a resource from a first cache to a second cache

Übertragung von Betriebsmitteln von einem Cache zu einem zweiten Cache

Transfert d'une ressource d'une premiere memoire cache vers une seconde memoire cache

PATENT ASSIGNEE:

ORACLE CORPORATION, (1640220), 500 Oracle Parkway, Redwood Shores, CA 94065, (US), (Proprietor designated states: all)

INVENTOR:

Bamford, Roger J., 2430 Hyde Street, San Francisco, CA 94109, (US)

Klots, Boris, 1566 Winding Way, Belmont, CA 94002, (US)

LEGAL REPRESENTATIVE:

Viering, Jentschura & Partner (100645), Postfach 22 14 43, 80504 Munchen,  
(DE)

PATENT (CC, No, Kind, Date): EP 1162538 A2 011212 (Basic)  
EP 1162538 A3 020925  
EP 1162538 B1 040512

APPLICATION (CC, No, Date): EP 2001119226 990212;

PRIORITY (CC, No, Date): US 74587 P 980213; US 199120 981124

DESIGNATED STATES: DE; FR; GB; NL

RELATED PARENT NUMBER(S) - PN (AN):

EP 1055173 (EP 99906927)

INTERNATIONAL PATENT CLASS: G06F-011/14 ; G06F-009/46 ; G06F-012/08

ABSTRACT WORD COUNT: 149

NOTE:

Figure number on first page: 6

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200150	4831
CLAIMS B	(English)	200420	2943
CLAIMS B	(German)	200420	2910
CLAIMS B	(French)	200420	3443
SPEC A	(English)	200150	7571
SPEC B	(English)	200420	7660
Total word count - document A			12405
Total word count - document B			16956
Total word count - documents A + B			29361

INTERNATIONAL PATENT CLASS: G06F-011/14 ...

... G06F-009/46 ...

... G06F-012/08

...SPECIFICATION in cache, thus reconstructing the current version in the  
cache of the database server that holds the latest PI version.

**MULTIPLE DATABASE SERVER FAILURE**

In case of a **multiple server** failure, when neither the latest PI  
**copy** nor any CURR copy have survived, it may happen that the changes  
made to the resource are spread over multiple...

...not to the size of the total configuration.

In systems where it is possible to determine which failed database  
servers **updated** the resource, only the **logs** of the failed database  
servers that updated the resource need to be merged and applied.  
Similarly, in systems where it is possible to determine which failed  
database servers updated the resource subsequent to the durably stored  
**version** of the resource, only the **logs** of the failed database servers  
that updated the resource subsequent to the durably stored version of the  
resource need to...

...resource transfers shall be described with reference to Figure 1. During  
the series of transfers, a resource is accessed at **multiple database  
servers** . Specifically, the resource is shipped along a cluster nodes for  
modifications, and then a checkpoint at one of the database...

...SPECIFICATION in cache, thus reconstructing the current version in the  
cache of the database server that holds the latest PI version.

**MULTIPLE DATABASE SERVER FAILURE**

In case of a **multiple server** failure, when neither the latest PI  
**copy** nor any CURR copy have survived, it may happen that the changes  
made to the resource are spread over multiple...

...not to the size of the total configuration.

In systems where it is possible to determine which failed database  
servers **updated** the resource, only the **logs** of the failed database

servers that updated the resource need to be merged and applied. Similarly, in systems where it is possible to determine which failed database servers updated the resource subsequent to the durably stored **version** of the resource, only the **logs** of the failed database servers that updated the resource subsequent to the durably stored version of the resource need to...

...resource transfers shall be described with reference to Figure 1. During the series of transfers, a resource is accessed at **multiple database servers**. Specifically, the resource is shipped along a cluster nodes for modifications, and then a checkpoint at one of the database...

39/3,K/6 (Item 6 from file: 348)  
DIALOG(R) File 348:EUROPEAN PATENTS  
(c) 2004 European Patent Office. All rts. reserv.

01216703

**DATA DISTRIBUTION IN A SERVER CLUSTER**  
**DATENVERTEILUNG IN EINEM SERVER-CLUSTER**  
**REPARTITION DE DONNEES DANS UN GROUPE DE SERVEURS**

**PATENT ASSIGNEE:**

MICROSOFT CORPORATION, (749866), One Microsoft Way, Redmond, WA 98052,  
(US), (Proprietor designated states: all)

**INVENTOR:**

GAMACHE, Rod, 25723 S.E. 31st Place, Issaquah, WA 98029, (US)  
MASSA, Michael, T., 4213 Stone Way N. 107, Seattle, WA 98103, (US)  
HELLAND, Patrick, J., 17081 S.E. 58th Avenue, Bellevue, WA 98006, (US)

**LEGAL REPRESENTATIVE:**

Grunecker, Kinkeldey, Stockmair & Schwanhausser Anwaltssozietat (100721)  
, Maximilianstrasse 58, 80538 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 1171817 A2 020116 (Basic)

EP 1171817 B1 030514

WO 2000058825 001005

APPLICATION (CC, No, Date): EP 2000917773 000306; WO 2000US5890 000306

PRIORITY (CC, No, Date): US 277503 990326

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;  
LU; MC; NL; PT; SE

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: **G06F-009/00**

**NOTE:**

No A-document published by EPO

LANGUAGE (Publication,Procedural,Application): English; English; English

**FULLTEXT AVAILABILITY:**

Available Text	Language	Update	Word Count
----------------	----------	--------	------------

CLAIMS B	(English)	200320	1216
----------	-----------	--------	------

CLAIMS B	(German)	200320	1074
----------	----------	--------	------

CLAIMS B	(French)	200320	1399
----------	----------	--------	------

SPEC B	(English)	200320	7011
--------	-----------	--------	------

Total word count - document A	0
-------------------------------	---

Total word count - document B	10700
-------------------------------	-------

Total word count - documents A + B	10700
------------------------------------	-------

INTERNATIONAL PATENT CLASS: **G06F-009/00**

...SPECIFICATION rate at which the operational data can be updated, in part because such updates are relatively slow, comprising careful transactional **logging** of **changes**. As a result, the existing solutions for storing the cluster operational data do not scale well to large clusters, since...

...need to be made to that data. Moreover, the cost of updating the operational data is higher when it is **replicated** to **multiple devices**, as in the preferred **replica** set solution. In sum, there are tradeoffs and limitations resulting from having to store the cluster operational data in a...

...CLAIMS in a server cluster (60), comprising, a first storage mechanism (57) having cluster core boot data (102) stored thereon, a **second**

**storage** mechanism (1081))) having cluster configuration data (106) stored thereon, and at least one node including a cluster service for **logging change** information related to the core boot data (102) to the first storage mechanism (57), and for **logging changes** to the cluster configuration data (106) to the **second storage** mechanism (1081))), wherein said first storage mechanism forms a quorum storage mechanism available in any configuration of said server cluster...

...the first storage mechanism (57) comprises a single quorum device (110).

16. The system of claim 13 wherein the first **storage** mechanism (57) comprises a **plurality of replica devices** (581))-583))).
17. The system of claim 16 wherein the node obtains control over a quorum of **replica devices**.
18. The system of claim 13 wherein the first storage mechanism (57) further maintains state information of the second storage...

39/3,K/8 (Item 8 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2004 European Patent Office. All rts. reserv.

01112642

**System for user control of version synchronization in mobile computing**  
**System fur Benutzersteuerung von Versionssynchronisation in mobiler**  
**Datenverarbeitung**  
**Systeme de controle par utilisateur de synchronisation de version en calcul**  
**mobile**

PATENT ASSIGNEE:

MITSUBISHI DENKI KABUSHIKI KAISHA, (208589), 2-3, Marunouchi 2-chome  
Chiyoda-ku, Tokyo 100-8310, (JP), (Applicant designated States: all)

INVENTOR:

Peng, Luoscheng, 129 San Thomas Aquino Road, Apt. 211, San Jose,  
California 95117, (US)

LEGAL REPRESENTATIVE:

Pfenning, Meinig & Partner (100961), Mozartstrasse 17, 80336 Munchen,  
(DE)

PATENT (CC, No, Kind, Date): EP 974895 A2 000126 (Basic)

APPLICATION (CC, No, Date): EP 99107509 990414;

PRIORITY (CC, No, Date): US 110748 980703

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;  
LU; MC; NL; PT; SE

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: **G06F-009/44** ; H04L-029/06

ABSTRACT WORD COUNT: 242

NOTE:

Figure number on first page: NONE

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200004	1863
SPEC A	(English)	200004	11084
Total word count - document A			12947
Total word count - document B			0
Total word count - documents A + B			12947

INTERNATIONAL PATENT CLASS: **G06F-009/44** ...

...SPECIFICATION indicates a time stamp which is earlier in time than the corresponding value in the summarizing version vector of a **second server**, **server** 164. This is illustrated by highlighted portion 166 of summarizing version vector 168 associated with server 164.

The updates are extracted by checking the version vectors or **update** stamps in the **update log** 170 of server 164. Note these version vectors or update stamps are the ones found at 86 in Figure 4...

39/3,K/10 (Item 10 from file: 348)  
DIALOG(R) File 348:EUROPEAN PATENTS  
(c) 2004 European Patent Office. All rts. reserv.

00971891

Database recovery system  
Datenbankwiederherstellungsverfahren  
Systeme de restauration de base de donnees  
PATENT ASSIGNEE:

Ogawa, Atsuro, (2464470), 5-11-6, Kanayama, Naka-ku, Nagoya-shi, Aichi,  
460-0022, (JP), (applicant designated states:  
AT;BE;CH;DE;DK;ES;FI;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)

INVENTOR:

Ogawa, Atsuro, 5-11-6, Kanayama, Naka-ku, Nagoya-shi, Aichi, 460-0022,  
(JP)

LEGAL REPRESENTATIVE:

Bohnenberger, Johannes, Dr. et al (55291), Meissner, Bolte & Partner  
Postfach 86 06 24, 81633 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 881570 A1 981202 (Basic)

APPLICATION (CC, No, Date): EP 98102894 980219;

PRIORITY (CC, No, Date): JP 97141828 970530

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G06F-011/14

ABSTRACT WORD COUNT: 211

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9849	917
SPEC A	(English)	9849	3122
Total word count - document A			4039
Total word count - document B			0
Total word count - documents A + B			4039

INTERNATIONAL PATENT CLASS: G06F-011/14

...SPECIFICATION the recovery of a database when a fault has occurred.

The data of a database is generally stored in a **secondary storage device** such as a hard disc. In preparation for when a fault occurs in the hard disc or other storage device in which the **database** is held, a backup **copy** of the entire **database** as of a certain time is taken and held in a **separate hard disc** or other storage device. When a fault occurs in the storage device in which the database is stored, the database is recovered by updating that storage **device** after it is rewritten with the backup **copy** or updating the backup copy itself using a **log** constituting a **history of updates** of the database from the time at which the backup was taken.

In a conventional recovery method, the data of...

...log-record serial number record part and when a page of a database stored in a first storage device is **updated** the log-record serial number recorded in the log-record serial number record part is increased and that increased log...

...records subsequent to a log-record recorded before copying of a backup copy of the database to a second storage **device** was started and the in-page log-record serial numbers assigned to the pages inside the **second storage device** shown in these log-records are respectively compared and when the in-log-record log-record serial number is larger than the in-page log-record serial number the page in the **second storage device** is updated using the content of the log-record, and the updated data in the **second storage device** is then used ...the database. Therefore, when taking a backup it is possible to copy content of the first storage device to the **second storage device** in page units at any time, and because for recovery it is not necessary to write content of the **second storage device** into the first storage device the time taken for recovery can be shortened.

BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1...

...constituting a data structure of a fixed length in a database drive 1 constituting a first storage device. As a **history** of **updates** of the database, **log** -records each including at least a page number and **updated** content are written in a **log** drive 3 serving as a log area. Preferably two or more log drives 3 are provided, and preferably each log

...drive 1.

In preparation for when a fault occurs in the database drive 1, the entire content of the database **drive 1** is periodically copied as a backup **copy** to a backup **drive 2** constituting a **second storage device**. The data in the database drive 1 is usually copied to the backup drive 2 in page units in the...

39/3,K/11 (Item 11 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2004 European Patent Office. All rts. reserv.

00958345

Virtual database space system and computer-readable recording medium recorded with database program

Virtuelles Datenbankraumsystem und rechnerlesbares Aufzeichnungsmedium auf dem ein Datenbankprogramm aufgezeichnet ist

Système d'espace de base de données virtuelle et support d'enregistrement lisible par ordinateur sur lequel un programme de base de données est enregistré

PATENT ASSIGNEE:

Ogawa, Atsuro, (2464470), 5-11-6, Kanayama, Naka-ku, Nagoya-shi, Aichi, 460-0022, (JP), (Applicant designated States: all)

INVENTOR:

Ogawa, Atsuro, 5-11-6, Kanayama, Naka-ku, Nagoya-shi, Aichi, 460-0022, (JP)

LEGAL REPRESENTATIVE:

Bohnenberger, Johannes, Dr. et al (55291), Meissner, Bolte & Partner  
Postfach 86 06 24, 81633 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 869437 A2 981007 (Basic)  
EP 869437 A3 020515

APPLICATION (CC, No, Date): EP 98102893 980219;

PRIORITY (CC, No, Date): JP 9783042 970401; JP 97149607 970606

DESIGNATED STATES: DE; FR; GB

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: G06F-011/14 ; G06F-012/08

ABSTRACT WORD COUNT: 86

NOTE:

Figure number on first page: 1

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9841	2473
SPEC A	(English)	9841	6365
Total word count - document A			8838
Total word count - document B			0
Total word count - documents A + B			8838

INTERNATIONAL PATENT CLASS: G06F-011/14 ...

... G06F-012/08

...SPECIFICATION necessary to carry out a recovery, and conventionally this has almost always been carried out by data in a target **secondary storage device** being recovered using a log constituting a history of updates. To carry out a recovery it has been necessary to...

...being down for a long time.

Also, to enable the database to be recovered when a failure occurs in the **secondary storage device** it has been usual for a backup copy of all the data of the **database** in a **secondary storage device** to be held in another storage device, but because when the database in the **secondary storage device** is updated during this backup operation the backup copy of the **database** may not match the **database** it has been necessary for updating of the database to be stopped for the duration of the backup operation.

SUMMARY...

39/3,K/13 (Item 13 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2004 European Patent Office. All rts. reserv.

00800736

COOPERATIVE DISTRIBUTED SYSTEM, AND JOURNAL AND RECOVERY PROCESSINGS  
THEREIN

KOOPERATIVES VERTEILTES SYSTEM, ZEITUNGSVERARBEITUNG UND  
RUCKGEWINNUNGSVERARBEITUNG IN DASSELBE  
SYSTEME ASSOCIATIF DECENTRALISE ET TRAITEMENTS DE JOURNAUX ET DE REPRISE  
DANS CELUI-CI

PATENT ASSIGNEE:

NTT DATA COMMUNICATIONS SYSTEMS CORPORATION, (1219452), 3-3 Toyosu  
3-chome, Koto-ku, Tokyo 135, (JP), (applicant designated states:  
DE;FR;GB)

INVENTOR:

ABE, Ken-ichi, NTT Data Communications Systems Corporation, 3-3, Toyosu  
3-chome Koto-ku Tokyo 135, (JP)  
IMAFUKU, Yukiharu, NTT Data Communications Systems Corporation, 3-3,  
Toyosu 3-chome Koto-ku Tokyo 135, (JP)  
KIRITA, Hitoshi, NTT Data Communications Systems Corporation, 3-3, Toyosu  
3-chome Koto-ku Tokyo 135, (JP)  
INOUE, Toshiyuki, NTT Data Communications Systems Corporation, 3-3,  
Toyosu 3-chome Koto-ku Tokyo 135, (JP)  
TAKAHASHI, Hiroaki, NTT Data Communications Systems Corporation, 3-3,  
Toyosu 3-chome Koto-ku Tokyo 135, (JP)  
SIGEHATA, Youji, NTT Data Communications Systems Corporation, 3-3, Toyosu  
3-chome Koto-ku Tokyo 135, (JP)  
KONNO, Yuichi, NTT Data Communications Systems Corporation, 3-3, Toyosu  
3-chome Koto-ku Tokyo 135, (JP)  
NARATA, Kazuaki, NTT Data Communications Systems Corporation, 3-3, Toyosu  
3-chome Koto-ku Tokyo 135, (JP)  
ODANAKA, Tadao, NTT Data Communications Systems Corporation, 3-3, Toyosu  
3-chome Koto-ku Tokyo 135, (JP)

LEGAL REPRESENTATIVE:

Hoffmann, Eckart, Dipl.-Ing. (5571), Patentanwalt, Bahnhofstrasse 103,  
82166 Grafelfing, (DE)

PATENT (CC, No, Kind, Date): EP 758114 A1 970212 (Basic)  
EP 758114 A1 980826  
WO 9627157 960906

APPLICATION (CC, No, Date): EP 96903243 960227; WO 96JP440 960227

PRIORITY (CC, No, Date): JP 9564830 950228; JP 9564831 950228; JP 9564832  
950228; JP 9564833 950228; JP 9568592 950302; JP 9591614 950324

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G06F-012/00 ; G06F-011/14

ABSTRACT WORD COUNT: 248

LANGUAGE (Publication,Procedural,Application): English; English; Japanese

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPAB97	2719
SPEC A	(English)	EPAB97	26848
Total word count - document A			29567
Total word count - document B			0
Total word count - documents A + B			29567

INTERNATIONAL PATENT CLASS: G06F-012/00 ...

... G06F-011/14

...SPECIFICATION resource.

In the following, the first server 140a which has the AP 141 will be termed the "coordinator", while the **second server** 140b which manages the resource will be termed the "participant". Although in practical terms the **two servers** 140a and 140b may be of the **same** construction and either of them may become the coordinator or the participant, nevertheless for the convenience of explanation Fig. 36 relates to the case that the first server 140a is the coordinator and the **second server** 140b is the participant, and only the essentials of the procedure for them to function as the respective servers are...

...the figure.

The coordinator 140a also, apart from the AP 141, comprises a flag log management section 143, a flag **log** file 145, and an **update** check request section 147. Further, the participant 140b also, apart from the resource manager 149, comprises a predetermined number (in...

39/3,K/14 (Item 14 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

(c) 2004 European Patent Office. All-rtts-reserv.-----

00783465

OBJECT-ORIENTED SYSTEM FOR CONFIGURATION HISTORY MANAGEMENT  
OBJEKTORIENTIERTE VORRICHTUNG FUR KONFIGURATIONSVERLAUFSVERWALTUNG  
SYSTEME ORIENTE OBJET POUR GERER L'HISTORIQUE DE LA CONFIGURATION  
PATENT ASSIGNEE:

OBJECT TECHNOLOGY LICENSING CORP., (2168570), 10355 N. De Anza Boulevard,  
Cupertino, CA 95014, (US), (applicant designated states: DE;FR;GB)

INVENTOR:

PARRISH, Jeff, W., 125 Lockhart Lane, Los Altos, CA 94022, (US)

MAGHOUL, Farzin, 3441 Skyline Drive, Hayward, CA 94542, (US)

LEGAL REPRESENTATIVE:

Kindermann, Manfred (6412), Patentanwalt, Sperberweg 29, 71032 Boblingen,  
(DE)

PATENT (CC, No, Kind, Date): EP 786109 A2 970730 (Basic)  
EP 786109 B1 980617  
WO 9618157 960613

APPLICATION (CC, No, Date): EP 95944603 951205; WO 95US15780 951205

PRIORITY (CC, No, Date): US 353027 941209

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G06F-009/44

NOTE:

No A-document published by EPO

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9825	1465
CLAIMS B	(German)	9825	1330
CLAIMS B	(French)	9825	1703
SPEC B	(English)	9825	10532
Total word count - document A			0
Total word count - document B			15030
Total word count - documents A + B			15030

INTERNATIONAL PATENT CLASS: G06F-009/44

...SPECIFICATION components and their modified properties are then sent to their respective History Servers. Further compression of the data within the **modified** properties is also possible. The **History** Servers, in turn, create a **version** in which to receive the modified data and add it to their databases.

Since it is possible that the root...



...History Server associated with each component. Whenever the iterator comes across a situation where a subtree root is in a **different** History **Server** than the parent, the root of the subtree (belonging to the **different** **Server**) is not drafted in the **same** History **Server** as the parent, instead it is marked. Once all components in the parent's Server are drafted, then the marked...

39/3,K/16 (Item 16 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

(c) 2004 European Patent Office. All rts. reserv.

00772573

**SNAPSHOT OF DATA STORED ON A MASS STORAGE SYSTEM**

**SCHNAPPSCHUSS VON AUF EINEM MASSENSPEICHERSYSTEM GESPEICHERTEN DATEN**

**IMAGE INSTANTANEE STATIQUE DES DONNEES STOCKEES DANS UN SYSTEME DE MEMOIRE DE MASSE**

**PATENT ASSIGNEE:**

Legato Systems Inc., (1900671), 2350 West El Camino Real, Mountain View, California 94040, (US), (Proprietor designated states: all)

**INVENTOR:**

OHRAN, Richard, S., 71 West 4750 North, Provo, UT 84604, (US)

OHRAN, Michael, R., 109 South 200 East, Orem, UT 84058, (US)

**LEGAL REPRESENTATIVE:**

Orr, William-McLean (34536), -Urquhart-Dykes-&-Lord,- Tower-House,-Merrion Way, Leeds LS2 8PA, (GB)

PATENT (CC, No, Kind, Date): EP 786111 A1 970730 (Basic)

EP 786111 A1 980128

EP 786111 B1 030416

WO 96012232 960425

APPLICATION (CC, No, Date): EP 95937485 951010; WO 95US13324 951010

PRIORITY (CC, No, Date): US 322697 941013

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE

EXTENDED DESIGNATED STATES: LT; LV; SI

INTERNATIONAL PATENT CLASS: G06F-012/16 ; G06F-012/08 ; G06F-011/14

**NOTE:**

No A-document published by EPO

LANGUAGE (Publication,Procedural,Application): English; English; English

**FULLTEXT AVAILABILITY:**

Available Text	Language	Update	Word Count
CLAIMS B	(English)	200316	2096
CLAIMS B	(German)	200316	1682
CLAIMS B	(French)	200316	2402
SPEC B	(English)	200316	4327
Total word count - document A			0
Total word count - document B			10507
Total word count - documents A + B			10507

INTERNATIONAL PATENT CLASS: G06F-012/16 ...

... G06F-012/08 ...

... G06F-011/14

...SPECIFICATION frequently updated, perhaps with every update to any other block. A copy of these blocks must be written to the **log** each time they are **changed**. This will, of course, result in a very large log file, with many of the entries being copies of the...

...of a mass storage system is possible if the mass storage system has the ability to produce a mirror, or **identical copy**, of one **disk**'s data on a **second disk**. At the time the static image is needed, mirroring of data is stopped and the mirror disk is used as...

...static image. When the static image is no longer necessary (for example, when the tape backup has been completed), the **two disks** are resynchronized, by copying any changes made during the time mirroring was not active to the mirror disk, and mirroring...

...on the main disk, when mirroring is stopped to produce the static image there is no longer the redundancy of **mirrored disk** or **disks** and updates can be lost if there is a disk failure. Furthermore, it requires an entire disk to be devoted...

...This requires updating the mirror disk with all the changes that have been made since mirroring was stopped. If a **log** of these **changes** is not available, this means that all the data on the mirror disk must be copied from the disk which...method and system for high concurrency of access during back-up copying of data stored in a storage subsystem including **multiple storage devices** coupled to a data processing system via a storage control unit having a memory. Data within each storage device is...

39/3,K/17 (Item 17 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2004 European Patent Office. All rts. reserv.

00752073

Data storage libraries

Datenspeicherungsbibliotheken

Bibliothèques de stockage de données

PATENT ASSIGNEE:-----

International Business Machines Corporation, (200120), Old Orchard Road,  
Armonk, N.Y. 10504, (US), (applicant designated states: DE;FR;GB)

INVENTOR:

Ford, Daniel Alexander, 52 Chester Street, Los Gatos, CA 95030, (US)

LEGAL REPRESENTATIVE:

Zerbi, Guido Maria et al (77893), Intellectual Property Department, IBM  
United Kingdom Ltd., Hursley Park, Winchester, Hampshire SO21 2JN, (GB)

PATENT (CC, No, Kind, Date): EP 708403 A2 960424 (Basic)

APPLICATION (CC, No, Date): EP 95115048 950925;

PRIORITY (CC, No, Date): US 324428 941017

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: **G06F-011/10** ; G11B-020/18

ABSTRACT WORD COUNT: 195

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPAB96	1524
SPEC A	(English)	EPAB96	5885
Total word count - document A			7409
Total word count - document B			0
Total word count - documents A + B			7409

INTERNATIONAL PATENT CLASS: **G06F-011/10** ...

...SPECIFICATION if parity log compression is employed, as compressed parity update values may be substantially smaller than a single block of **secondary storage** and so will reduce **secondary storage** accesses. NVRAM is also useful for storing the pointers to the parity **update logs** for each of the media units. The alternative is to **store** the pointers on the **same** magnetic fixed **disk** that **stores** the parity log. ...

...CLAIMS redundancy group are mapped across the disks in successive striping increments so that a striping increment is located on the **same disk** that contains the parity stripe protecting the prior striping increment.

12. The array according to claim 10 or 11 wherein the parity **updates** stored in the parity **log** of the nonvolatile memory are organized as a linked list of parity update blocks, one parity update block for each...

...each of the redundancy groups.

13. The array according to claim 10, 11 or 12 wherein the nonvolatile memory for **logging** parity **updates** is a magnetic fixed disk drive.
14. The array according to claim 10, 11, 12 or 13 further comprising data ...
- ...compressing the logged parity updates.
15. In a data storage library system of the type having a nonvolatile storage, a **plurality** of data **storage** drives and a plurality of media units mountable to and dismountable from the drives, the media units being arranged into...

39/3,K/28 (Item 28 from file: 348)  
DIALOG(R) File 348:EUROPEAN PATENTS  
(c) 2004 European Patent Office. All rts. reserv.

00393800

**Method of producing a duplication of a database**  
**Verfahren zur Herstellung einer Duplikation von einer Datenbank**  
**Methode pour effectuer une duplication d'une base de donnees**  
PATENT ASSIGNEE:

HITACHI, LTD., (204144), 6, Kanda Surugadai 4-chome, Chiyoda-ku, Tokyo  
100, (JP), (applicant designated states: DE;GB)

INVENTOR:

Tanaka, Kazuaki, Hitachi Kamitsuruma Shataku A-306, 17-12 Yutakacho,  
Sagamihara-shi, (JP)  
Yamashita, Kuniaki, 2-17-13 Nakazato, Ninomiyamachi, Naka-gun,  
Kanagawa-ken, (JP)  
Ogata, Hiromichi, 2165-6, Fujisawa, Fujisawa-shi, (JP)

LEGAL REPRESENTATIVE:

Strehl Schubel-Hopf Groening & Partner (100941), Maximilianstrasse 54,  
80538 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 399560 A2 901128 (Basic)  
EP 399560 A3 911127  
EP 399560 B1 970305

APPLICATION (CC, No, Date): EP 90110000 900525;

PRIORITY (CC, No, Date): JP 89131345 890526

DESIGNATED STATES: DE; GB

INTERNATIONAL PATENT CLASS: G06F-011/14 ; G06F-017/30

ABSTRACT WORD COUNT: 197

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	1871
CLAIMS B	(English)	EPAB97	1870
CLAIMS B	(German)	EPAB97	1488
CLAIMS B	(French)	EPAB97	2433
SPEC A	(English)	EPABF1	16076
SPEC B	(English)	EPAB97	16010
Total word count - document A			17949
Total word count - document B			21801
Total word count - documents A + B			39750

INTERNATIONAL PATENT CLASS: G06F-011/14 ...

... G06F-017/30

...SPECIFICATION set to the state indicating that updating has been made.

(3) All update log data, which is set in real **storage** of virtual pages in correspondence to the **same** cylinder (only in the case of an external storage having the concept of cylinder, e.g., magnetic **disk**) and the **same** track of the external **storage** where the **copy** data is stored, are arranged based on the control flag on completion of (2).

(4) The update log data, which...

...adjacent tracks.

2. As will be described in the following items (1) through (4), as a control value indicating that **update** log data is set in real storage of a corresponding virtual pages, a value indicative of the time sequential relation...

...processing time.

In case copy is stored distributively in a plurality of external storage units, the write process of the **update log** data, which is set in the virtual page real **storage**, over the **copy** flag is carried out concurrently for individual external **storage** units where the **copy** data is stored thereby to further reduce the processing time.

Consequently, the time for fetching the update data and the...

...a virtual storage area consisting of virtual pages which are in one-to-one correspondence to blocks in an external **storage**, where **database copy** data for which **duplication** production is intended is stored, and arranged in the order of physical address of the blocks is set, and the...input time is reduced from the total value of input times of all storage units to the longest time among **update log** data inputs from one **storage** unit. In case the **copy** data is stored distributively in a plurality of external storages, the overwriting time to the storages is reduced from the...

...or write the update log data to an external storage at a high speed. In this case, conventionally, before the **update log** data stored in a different **storage** unit is written over the **copy** data, it is processed for the rearrangement in the time sequential order of database updating. According to this invention, this rearrangement process is unneeded, whereby the database operation is simplified, and reduction of the database fault recovery time and **database** multiplexing with retardation are accomplished by **duplication** production through the writing of the **update log** data over the copy data.

The following describes embodiment 6 of this invention.

Fig. 21 is a block diagram of...

...the embodiment 6.

The embodiments 1 through 5 are of the case based on the database recovery method in which **update log** data of a **database** is written over **copy** data called whole **copy** thereby to restore the **database** contents before a fault has occurred, and they do not consider a method of database duplication production in which  $\text{copy} \times 24.3 \text{ ms} = 7290 \text{ sec}$

According to this invention, it is virtually equal to the read time for the **update log** data because of virtual sequential writing. More precisely, the time is expected much shorter in proportion to the number ...

...the fact that the copy data is distributed on a plurality of magnetic disks.

Consequently, the time for writing the **update log** data over the copy data, which is the most part of the **database duplication** production time, is reduced significantly, whereby fast **database duplication** production can be accomplished.

(3) In case the **update log** data is stored in a plurality of external storage units, the input time can be reduced by implementing the data entry for each **storage** unit.

(4) In case the **copy** data is stored in a plurality of external storage units, the time for overwriting can be reduced by implementing the overwriting of the **update log** data for each storage unit.

In the foregoing processes, paging for areas in virtual storage can be avoided, whereby the...

...data storage area in the virtual storage, in a nonvolatile storage unit, the event of recursive write process for the **update log** data over the copy data due to power outage or the like of the main storage does not occur, whereby a highly reliable **database duplication** producing process can be accomplished.

Through the use of the update log data produced at database updating, the need of...

avoided, whereby the...

...data storage area in the virtual storage, in a nonvolatile storage unit, the event of recursive write process for the **update log** data over the copy data due to power outage or the like of the main storage does not occur, whereby a highly reliable **database duplication** producing process can be accomplished.

Through the use of the update log data produced at database updating, the need of...

39/3,K/38 (Item 4 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

(c) 2004 WIPO/Univentio. All rts. reserv.

00801699 \*\*Image available\*\*

**SYNCHRONIZING DATA AMONG MULTIPLE DEVICES IN A PEER-TO-PEER ENVIRONMENT**  
**SYNCHRONISATION DE DONNEES ENTRE PLUSIEURS DISPOSITIFS DANS UN**  
**ENVIRONNEMENT POINT-A-POINT**

Patent Applicant/Assignee:

JARNA INC, 1800 El Camino Real, Suite D, 2nd floor, Menlo Park, CA 94027,  
US, US (Residence), US (Nationality)

Inventor(s):

KAPOOR Sanjay, 475 Cumulus Avenue, #32, Sunnyvale, CA 94087, US,

Legal Representative:

VAUGHAN Daniel (et al) (agent), Park & Vaughan LLP, 702 Marshall Street,  
Suite 310, Redwood City, CA 94063, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200135211 A2-A3 20010517 (WO 0135211)

Application: WO 2000US30693 20001108 (PCT/WO US0030693)

Priority Application: US 99436885 19991109

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE  
ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT  
LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM  
TR TT TZ UA UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 12682

Main International Patent Class: G06F-009/46

International Patent Class: G06F-017/30

Fulltext Availability:

Detailed Description

Claims

English Abstract

A system for synchronizing data in a peer-to-peer environment includes **multiple** computing devices sharing a set of data. Each **device** includes a **replication** module for logging and trading data changes with other devices. A device having sufficient resources may also include a local version of the shared data and an application server that allows access to the data even while the **device** is disconnected from other **devices**. The **replication** module logs a description of each operation that alters the data. When one device is connected to a second device in the system to synchronize data, the **devices' replication** modules exchange log entries. For example, one **device** receives from a **second device** data changes made by the **second device** and other devices that already synchronized with the **second device**. Thus, the method of data synchronization is transitive and allows a **device** to fully update its local **copy** of the shared data by connecting to just one other device, which may or may not be a central server.

#### Detailed Description

... by other devices. Devices may be added and removed dynamically while the system is in use.

As described below, the **devices** may be configured to automatically **replicate** or synchronize their data soon after being connected (e.g., via a network) to a peer device.

Illustratively, **two** synchronizing **devices** exchange **log** file entries that describe data **changes** that each device knows of (e.g., performed by the sending device or a device with which the sender previously...to reflect data changes learned of from device I 00b.

23

In state 400, an application or utility shared among **multiple devices** ' is operated on device I 00a. This may occur while device I 00a is connected or disconnected from other devices...

...manner. As described previously, only transactions or operations that change the data must be described to other devices. Each data **change** is logged to a local **log** file by a **replication** engine operating on **device** I 00a.

In state 404, ~~device I 00a connects to device I 00b (if not already connected)~~ in order to...

#### Claim

... wherein said second device operated a first application prior to said connection while disconnected from every other device in the **multiple devices**; 5 receiving a second record from said second device corresponding to a second change to the shared data performed...wherein the data structure further comprises data encompassing the first change.

20 A system for synchronizing data among multiple computing **devices**, each of the computing devices comprising:  
a processor configured to execute an application that uses data shared among the **multiple devices** ;  
an application server configured to manipulate a local version of said shared data; a change log configured to store descriptions...

...version of said shared data; and  
a replication module configured to store entries in said log file pertaining to data **changes** originated by said application server;  
1 5 wherein said processor executes said application and said application server manipulates said data while the device is disconnected from the other **multiple** computing **devices** ; and  
said replication module transmits one or more entries in said log file to a second of the **multiple devices** when the device is connected to the **second device** .

21 The system of claim 20, wherein the device receives from the **second device** log file entries corresponding to a set of data changes applied to a version of said shared data stored on said **second device** ; and  
said set of data changes include data changes originated by the **second device** and data changes originated by a third device.

(c) 2004 WIPO/Univentio. All rts. reserv.

00757120 \*\*Image available\*\*

**LOCATION ENHANCED INFORMATION DELIVERY SYSTEM**  
**SYSTEME AMELIORE DE DISTRIBUTION D'INFORMATIONS DE LOCALISATION**

Inventor(s):

SMITH Jonathan M, 771 Princeton-Kingston Road, Princeton, NJ 08540-4165, US,

PARKES David C, 1122 Spruce Street #3D, Philadelphia, PA 19107, US,

Patent Applicant/Inventor:

HERZ Frederick, P.O. Box 42891, Philadelphia, PA 19101-2891, US, US  
(Residence), US (Nationality)

Legal Representative:

HUNN Melvin A (et al) (agent), Hill & Hunn, LLP, Suite 1440, 201 Main Street, Fort Worth, TX 76102, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200070504 A2-A3 20001123 (WO 0070504)

Application: WO 2000US13858 20000519 (PCT/WO US0013858)

Priority Application: US 99314321 19990519

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ EE ES  
FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU  
LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR  
TT TZ UA UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 18208

Main International Patent Class: G06F-017/30

International Patent Class: G06F-017/60

Fulltext Availability:

Detailed Description

Detailed Description

... Other variations on this architecture include users accessing an ATM, pay phone, kiosk or point of sale terminal within the **same** or **different store** that the user is presently visiting. For example, pre-order placements, from other vendor stores could be accompanied with an...

...systems utilize infrared detectors mounted on the ceiling of the store which enables triangulation of the shopper's present location. **Historic** and real time profile **updates** to the UID can be used to update an electronic shopping list, for example in addition to general product location...

39/3,K/49 (Item 15 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

(c) 2004 WIPO/Univentio. All rts. reserv.

00745455 \*\*Image available\*\*

**DATA DISTRIBUTION IN A SERVER CLUSTER**  
**REPARTITION DE DONNEES DANS UN GROUPE DE SERVEURS**

Patent Applicant/Assignee:

MICROSOFT CORPORATION, One Microsoft Way, Redmond, WA 98052, US, US  
(Residence), US (Nationality)

Inventor(s):

GAMACHE Rod, 25723 S.E. 31st Place, Issaquah, WA 98029, US

MASSA Michael T, 4213 Stone Way N. #107, Seattle, WA 98103, US

HELLAND Patrick J, 17081 S.E. 58th Avenue, Bellevue, WA 98006, US

Legal Representative:

MICHALIK Albert S, Michalik & Wylie, PLLC, Suite 103, 14645 Bel-Red Road,

Bellevue, WA 98007, US

Patent and Priority Information (Country, Number, Date):

Patent: WO 200058825 A2 20001005 (WO 0058825)

Application: WO 2000US5890 20000306 (PCT/WO US0005890)

Priority Application: US 99277503 19990326

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE  
GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK  
MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU  
ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 9156

Main International Patent Class: G06F-009/00

Fulltext Availability:

Detailed Description

Claims

Detailed Description

... rate at which the operational data can be updated, in part because such updates are relatively slow, comprising careful transactional **logging** of **changes**. As a result, the existing solutions for storing the cluster operational data do not scale well to large clusters, since...

...need to be made to that data. Moreover, the cost of updating the operational data is higher when it is **replicated** to **multiple devices**, as in the preferred **replica** set solution. In sum, there are tradeoffs and limitations resulting from having to store the cluster operational data in a...

Claim

... of distributing data in a server cluster,, comprising, a first storage mechanism having cluster core boot data stored thereon, a **second storage** mechanism having cluster configuration data stored thereon, and at least one node including a cluster service for **logging change** information related to the core boot data to the first storage mechanism, and for **logging changes** to the cluster configuration data to the **second storage** mechanism.

14 The system of claim 13 wherein the first storage mechanism comprises a plurality of nodes, each node having...

...storage mechanism comprises a single quorum device.

16 The system of claim 13 wherein the first storage mechanism comprises a **plurality** of replica **devices**.

17 The system of claim 16 wherein the node obtains control over a quorum of **replica devices**.

18 The system of claim 13 wherein the first storage mechanism further maintains state information of the **second storage** mechanism.

19 The system of claim 13 wherein the **second**



storage mechanism comprises a plurality of storage elements.

- 29

, The system of claim 19 wherein the first storage mechanism further maintains...

39/3,K/51 (Item 17 from file: 349)

DIALOG(R) File 349:PCT FULLTEXT

(c) 2004 WIPO/Univentio. All rts. reserv.

00738012 \*\*Image available\*\*

METHOD AND SYSTEM FOR MIRRORING AND ARCHIVING MASS STORAGE

PROCEDE ET SYSTEME DE DOUBLEMENT ET D'ARCHIVAGE D'UNE MEMOIRE DE GRANDE CAPACITE

Patent Applicant/Assignee:

LEGATO SYSTEMS INC, 3219 Porter Drive, Palo Alto, CA 94304, US, US

(Residence), US (Nationality)

Inventor(s):

OHRAN Richard S, 71 West 4750 North, Provo, UT 84604, US

Legal Representative:

GILMORE Richard C, Workman, Nydegger & Seeley, 1000 Eagle Gate Tower, 60

East South Temple, Salt Lake City, UT 84111, US

Patent and Priority Information (Country, Number, Date):

Patent: WO-200050999-A1-20000831-(WO-0050999)

Application: WO 2000US3787 20000214 (PCT/WO US0003787)

Priority Application: US 99255486 19990223

Designated States:

(Protection type is "patent" unless otherwise stated -for applications prior to 2004)

AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD  
GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD  
MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG  
UZ VN YU ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 14752

Main International Patent Class: G06F-012/16

International Patent Class: G06F-013/16 ...

Fulltext Availability:

Detailed Description

Detailed Description

... contains consistent data. Otherwise, the data stored in the secondary system is of somewhat less worth. Combining the initially synchronized **secondary mass storage** with the updates, including the most recent update, yields the most recent consistent state of the primary mass storage. However, the **secondary mass storage** keeps the updates and the initial synchronized data **separate**. This **separate storage** allows for a combination of the synchronized data with something short of the most recent **updates** to provide a **history** of each **mirrored** consistent state of the primary mass **storage**. The foregoing processes represent data archiving, which generates a historical record of the data as it was stored at the...

...not have been sent to the secondary system, but remain in the cache.

Data mirroring in this manner generates a **volume** of data that is the **same** as the data stored currently at the primary system. In addition, maintaining the cache can allow requests for mirrored or...

39/3,K/61 (Item 27 from file: 349)

DIALOG(R) File 349:PCT FULLTEXT

(c) 2004 WIPO/Univentio. All rts. reserv.

00431184      \*\*Image available\*\*

**SYNCHRONIZATION OF DATABASES**

**SYNCHRONISATION DE BASES DE DONNEES**

Patent Applicant/Assignee:

PUMA TECHNOLOGY INC,

BOOTHBY David J,

DALEY Robert C,

MARIEN John R,

Inventor(s):

BOOTHBY David J,

DALEY Robert C,

MARIEN John R,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9821648 A1 **19980522**

Application: WO 97US20627 19971113 (PCT/WO US9720627)

Priority Application: US 96749926 19961113; US 97927922 19970911; US  
97964751 19971105

Designated States:

(Protection type is "patent" unless otherwise stated - for applications  
prior to 2004)

AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH HU  
ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ  
PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW GH KE LS  
MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH DE DK ES FI FR GB GR  
IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 17359

Patent and Priority Information (Country, Number, Date):

Patent: ... **19980522**

Main International Patent Class: **G06F-009/00**

Fulltext Availability:

Detailed Description

Publication Year: **1998**

Detailed Description

... necessary to

20 update the remote database and the remote history file to  
the remote segment. The remote segment then **updates** its  
**history** file and the remote database.

Since both the host and remote segments rely  
heavily on history files to enable distributed...

...use history files that correspond to one  
another, i.e. both contain records corresponding to a  
previous synchronization of the **same two databases**, In  
the described embodiment, the remote and host history  
30 files are named using a common naming convention. The  
name...described embodiment uses the host history  
file to perform this transformation. At the beginning of  
a first synchronization between the **two databases**, all  
records in the remote database are loaded into the host  
**history** file. As **changes**, additions, and deletions are  
made to the remote **database**, during each subsequent  
synchronization, the **same** changes, additions, and  
deletions are made to the host history file. Therefore,  
the host history file at the end of each synchronization  
will contain a **copy** of the relevant content of the remote  
**database** after synchronization. By relevant, we mean  
data in the fields that are synchronized, For example,  
it may be the case...

39/3,K/62      (Item 28 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

(c) 2004 WIPO/Univentio. All rts. reserv.

00385857      \*\*Image available\*\*

**DISK CACHING DISK**

**SYSTEME DE TYPE DISQUE CACHANT UN DISQUE**

Patent Applicant/Assignee:

THE BOARD OF GOVERNORS FOR HIGHER EDUCATION STATE OF RHODE ISLAND AND  
PROVIDENCE PLANTATIONS,

Inventor(s):

YANG Qing,

HU Yiming,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9726600 A1 19970724

Application: WO 97US661 19970116 (PCT/WO US9700661)

Priority Application: US 96588132 19960118

Designated States:

(Protection type is "patent" unless otherwise stated - for applications  
prior to 2004)

AU CA JP AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE

Publication Language: English

Fulltext Word Count: 9252

Patent and Priority Information (Country, Number, Date):

Patent: ... 19970724

Main International Patent Class: G06F-013/10

International Patent Class: G06F-13:00 .....

... G06F-13:12

Fulltext Availability:

Detailed Description

Publication Year: 1997

Detailed Description

... June 1990. The changes of meta-data

in write buffer are collected into logs and are periodically  
(typically every 30 seconds) written into disk to ensure a  
15 reliable copy of changes. Cache logging eliminates many small  
writes caused by meta-data updates. The cache logging works  
in file system level while the DCD works in the device level.

The cache logging works horizontally where the...

39/3,K/63 (Item 29 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

(c) 2004 WIPO/Univentio. All rts. reserv.

00335645

**OBJECT-ORIENTED SYSTEM FOR CONFIGURATION HISTORY MANAGEMENT**

**SYSTEME ORIENTE OBJET POUR GERER L'HISTORIQUE DE LA CONFIGURATION**

Patent Applicant/Assignee:

TALIGENT INC,

Inventor(s):

PARRISH Jeff W,

MAGHOUL Farzin,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9618157 A2 19960613

Application: WO 95US15780 19951205 (PCT/WO US9515780)

Priority Application: US 94353027 19941209

Designated States:

(Protection type is "patent" unless otherwise stated - for applications  
prior to 2004)

CA CN JP AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE

Publication Language: English

Fulltext Word Count: 11931

Patent and Priority Information (Country, Number, Date):

Patent: ... 19960613

Main International Patent Class: G06F-009/44

Fulltext Availability:  
Detailed Description  
Publication Year: 1996

#### Detailed Description

... and their modified properties

0 are then sent to their respective History Servers. Further compression of the data within the **modified** properties is also possible. The **History** Servers, in turn,, create a **version** in which to receive the modified data and add it to their databases.

Since it is possible that the root...

...History Server associated with each component. Whenever the iterator comes across a situation where a subtree root is in a **different** History **Server** than the parent, the root of the subtree (belonging to the 0 **different** **Server**) is not drafted in the **same** History **Server** as the parent, instead it is marked. Once all components in the parent's Server are drafted, then the marked...

39/3,K/64 (Item 30 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2004 WIPO/Univentio. All rts. reserv.

00290660

#### METHOD AND APPARATUS FOR DATA REPLICATION PROCEDE ET DISPOSITIF DE REPRODUCTION DE DONNEES

Patent Applicant/Assignee:

ORACLE CORPORATION,

Inventor(s):

JAIN Sandeep,

DANIELS Dean,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9508809 A2 19950330

Application: WO 94US10093 19940909 (PCT/WO US9410093)

Priority Application: US 93586 19930924

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AM AT AU BB BG BR BY CA CH CN CZ DE DK ES FI GB GE HU JP KE KG KP KR KZ  
LK LR LT LU LV MD MG MN MW NL NO NZ PL PT RO RU SD SE SI SK TJ TT UA UZ  
VN KE MW SD AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE BF BJ CF CG  
CI CM GA GN ML MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 14936

Patent and Priority Information (Country, Number, Date):

Patent: ... 19950330

Main International Patent Class: G06F-017/30

International Patent Class: G06F-17:40

Fulltext Availability:

Detailed Description

Publication Year: 1995

#### Detailed Description

... related in some way to the error), must be undone to maintain the data integrity in existence prior to the **updates**. However, the redo **log** was not designed for capturing **modification** information for propagation to a **second** **database** system. Thus, when the log - 16 is used for its intended purpose as well as a resource for data **replication**, a **storage** management problem arises, because a redo log that it used to retain propagation information can never be moved off-line...

File 275:Gale Group Computer DB(TM) 1983-2004/Aug 30  
     (c) 2004 The Gale Group  
 File 621:Gale Group New Prod.Annou.(R) 1985-2004/Aug 30  
     (c) 2004 The Gale Group  
 File 636:Gale Group Newsletter DB(TM) 1987-2004/Aug 30  
     (c) 2004 The Gale Group  
 File 16:Gale Group PROMT(R) 1990-2004/Aug 30  
     (c) 2004 The Gale Group  
 File 160:Gale Group PROMT(R) 1972-1989  
     (c) 1999 The Gale Group  
 File 148:Gale Group Trade & Industry DB 1976-2004/Aug 30  
     (c)2004 The Gale Group  
 File 624:McGraw-Hill Publications 1985-2004/Aug 27  
     (c) 2004 McGraw-Hill Co. Inc  
 File 15:ABI/Inform(R) 1971-2004/Aug 30  
     (c) 2004 ProQuest Info&Learning  
 File 647:CMP Computer Fulltext 1988-2004/Aug W4  
     (c) 2004 CMP Media, LLC  
 File 674:Computer News Fulltext 1989-2004/Aug W3  
     (c) 2004 IDG Communications  
 File 696:DIALOG Telecom. Newsletters 1995-2004/Aug 28  
     (c) 2004 The Dialog Corp.  
 File 369:New Scientist 1994-2004/Aug W3  
     (c) 2004 Reed Business Information Ltd.

Set	Items	Description
S1	10561048	STORE OR STORES OR STORAGE OR DEVICE? ? OR SERVER? ? OR DRIVE? ? OR DATABASE? ? OR DATA()BASE? ? OR REPOSITOR??? OR VOLUME? ? OR TAPE OR TAPES OR CASSETTE? ? OR DISK? ? OR DISC? ?
S2	477811	(MULTIPLE OR MULTIPLICITY OR SEVERAL OR PLURAL? OR DUAL??? OR SEPARATE OR DIFFERENT OR VARIOUS OR MIRRORED OR REDUNDANT - OR FARM? ? OR SECOND??? OR 2ND OR TWO OR ARRAY? ? OR PAIR? ? - OR CLUSTER? ?)(2W)S1
S3	2296259	STORAGE()AREA()NETWORK? ? OR SAN OR SANS
S4	65039	S1(7N)(RECENT OR CURRENT??? OR LATEST OR LATER OR NEWEST OR NEWER OR NEW OR UP(1W)DATE OR FRESH OR FRESHEST)(7N)(SELECT? - ?? OR CHOOS??? OR CHOSEN? OR PICK???)
S5	453858	S1(7N)(COPY OR COPIES OR DUPLICAT? OR MIRRORED OR REPLICA? OR SAME OR IDENTICAL?)
S6	360250	(UPDAT??? OR CHANG??? OR REVIS??? OR MODIF???? OR MODIFICATION OR VERSION? ?)(5N)(COUNT??? OR LOG? ? OR LOGGING OR HISTOR??? OR FREQUENC??? OR INCIDENCE OR TABLE? ? OR FILE? ? OR LIST????)
S7	102	S2:S3(50N)S4(50N)S6
S8	76	RD (unique items)
S9	70	S8 NOT PY=2000:2004
S10	112205	(UPDAT??? OR CHANG??? OR REVIS??? OR MODIF???? OR MODIFICATION OR VERSION? ?)(5N)(COUNT??? OR LOG? ? OR LOGGING OR HISTOR???)
S11	13	S2:S3(50N)S4(50N)S10
S12	9	RD (unique items)
S13	42157	S1(5N)(RECENT OR CURRENT??? OR LATEST OR LATER OR NEWEST OR NEWER OR NEW OR UP(1W)DATE OR FRESH OR FRESHEST)(5N)(SELECT? - ?? OR CHOOS??? OR CHOSEN? OR PICK???)
S14	44	S10(50N)S13
S15	28	RD (unique items)
S16	19	S15 NOT PY=2000:2004

16/3,K/1 (Item 1 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2004 The Gale Group. All rts. reserv.

01711450 SUPPLIER NUMBER: 16256229 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Operating environments. (PC Tech: PC Solutions) (question-and-answer)**  
**(Column)**  
PC Magazine, v13, n21, p380(3)  
Dec 6, 1994  
DOCUMENT TYPE: Column ISSN: 0888-8507 LANGUAGE: ENGLISH  
RECORD TYPE: FULLTEXT  
WORD COUNT: 990 LINE COUNT: 00074

... name to VGALOGO.RLE. From the DOS prompt, run the Windows SETUP program, note your **current** display **driver**, and change to a different **driver**. Run SETUP again, and **select** the original display **driver**. That's it! SETUP builds a **new** version of WIN.COM, the program that starts Windows, and the new **version** incorporates your **logo**.  
One warning: If the WIN.COM built using your logo is larger than 64K, it...

16/3,K/2 (Item 2 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2004 The Gale Group. All rts. reserv.

01597786 SUPPLIER NUMBER: 13722196 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Blanket coverage. (Sybase) (Company Profile)**  
Button, Kate  
Computer Weekly, p31(1)  
April 15, 1993  
DOCUMENT TYPE: Company Profile ISSN: 0010-4787 LANGUAGE: ENGLISH  
RECORD TYPE: FULLTEXT; ABSTRACT  
WORD COUNT: 1302 LINE COUNT: 00104

... our products are not just vapourware."  
More likely, Sybase's break with tradition was to **counter** Oracle's January release of **Version 7**.  
As a result, the business world is now in the advantageous position of having some of the **database** industry's **latest** releases to **choose** from simultaneously.  
According to Forrester Research, the main difference between Oracle and Sybase products is...

16/3,K/3 (Item 3 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2004 The Gale Group. All rts. reserv.

01285940 SUPPLIER NUMBER: 06959762 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Borland boosts Paradox. (Software Review) (data base management software)**  
**(evaluation)**  
Falkner, Mike  
PC-Computing, v2, n2, p39(2)  
Feb, 1989  
DOCUMENT TYPE: evaluation ISSN: 0899-1847 LANGUAGE: ENGLISH  
RECORD TYPE: FULLTEXT; ABSTRACT  
WORD COUNT: 410 LINE COUNT: 00029

... cross-tabs, a useful analysis tool found only in R:BASE and a few other **database** packages. Using the **current** data table, you can **select** two data fields, one for rows and one for columns. Paradox then cross-tabulates them and creates an answer table with the sum, min, max, or **count** of the fields.  
**Version 3.0** also throws in a few goodies to Paradox's already powerful Query by...

16/3,K/4 (Item 1 from file: 621)  
DIALOG(R)File 621:Gale Group New Prod.Annou.(R)  
(c) 2004 The Gale Group. All rts. reserv.

01725623 Supplier Number: 53072736 (USE FORMAT 7 FOR FULLTEXT)  
**Tactician Previews Targeter EXPRESS at the DMA's 81st Annual Conference.**  
Business Wire, p1203  
Oct 9, 1998  
Language: English Record Type: Fulltext  
Document Type: Newswire; Trade  
Word Count: 473

... selects from a list of marketing programs (i.e. Direct Marketing Program, Special Events Promotion, **New Store** Opening, etc.). Also **selected** are industry-specific business rules (i.e. Auto Dealers, Convenience **Stores** , Grocery **Stores** , etc.). Once the Targeter EXPRESS Wizard is complete, clicking Finish executes the program. Users always have the option of fine-tuning and re-running each Wizard.

Targeter EXPRESS includes: **updated** household **counts** for ZIP Code and sub-ZIP Code areas; nationwide ZIP Code and sub-ZIP Code...

16/3,K/5 (Item 1 from file: 636)  
DIALOG(R)File 636:Gale Group Newsletter DB(TM)  
(c) 2004 The Gale Group. All rts. reserv.

03250075 Supplier Number: 46671245 (USE FORMAT 7 FOR FULLTEXT)  
**Netscape Unveils FastTrack Server for Windows 95**  
Internet Content Report, v1, n12, pN/A  
Sept 1, 1996  
Language: English Record Type: Fulltext  
Document Type: Newsletter; General  
Word Count: 2858

... of programming languages.  
Maximized Produces Web Server Utility  
Maximized Software has produced Web Juggler, a **new Web server** utility module providing a solution for Web site "**content selection**," the process by which Web content, ranging from a single image to an entire page  
...

...designed to correspond to a variety of criteria, including the user's browser type, browser **version** , time of day, **country** of origin, domain name or preferred language. Webmasters can create their own "rules" on which...

16/3,K/6 (Item 2 from file: 636)  
DIALOG(R)File 636:Gale Group Newsletter DB(TM)  
(c) 2004 The Gale Group. All rts. reserv.

02885518 Supplier Number: 45858678 (USE FORMAT 7 FOR FULLTEXT)  
**Log-On's Quick Choice**  
Israel Business Today, v9, n13, pN/A  
Oct 15, 1995  
Language: English Record Type: Fulltext  
Document Type: Magazine/Journal; General Trade  
Word Count: 75

(USE FORMAT 7 FOR FULLTEXT)  
TEXT:  
Ramat Gan-based software house, **Log -On**, has released a **new version** of **Quick Select** , an application that enhances the performance of **database** software. The **latest** version offers compatibility with Oracle, C, Cobol and Unix environments.

16/3,K/7 (Item 3 from file: 636)

DIALOG(R)File 636:Gale Group Newsletter DB(TM)  
(c) 2004 The Gale Group. All rts. reserv.

01522045 Supplier Number: 42180341 (USE FORMAT 7 FOR FULLTEXT)  
**SYSTEMS ENGINEER, RELEASE 2.2**  
CASE Strategies, v3, n7, pN/A  
July, 1991  
Language: English Record Type: Fulltext  
Document Type: Magazine/Journal; Trade  
Word Count: 4537

... manager should also be authorized as an ordinary user.  
Also, when you log on you **select** the **database** in which you will work. If you wish to **change databases later**, or **log** on with a different set of privileges (assuming you are authorized to do so), you...

16/3,K/8 (Item 1 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2004 The Gale Group. All rts. reserv.

05821099 Supplier Number: 50328844 (USE FORMAT 7 FOR FULLTEXT)  
**HARD TIMES**  
Desjardins, Doug  
Video Store, p20  
Sept 13, 1998  
Language: English Record Type: Fulltext  
Document Type: Magazine/Journal; Trade  
Word Count: 1836

... stores listed last year that aren't in the book this year.'  
What Prost did **count** was 27 Video **Updates**, 19 Blockbuster Videos and seven Hollywood Videos - a concentration of major chains that sparked a  
...

...the shakeout] just by the never-ending stream of closing sales I go to to **pick** up inventory,' Prost says. 'I can't remember the last time a **new store** opened. There have been plenty of new Video Updates and Blockbusters, but that's about...

16/3,K/9 (Item 2 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2004 The Gale Group. All rts. reserv.

03591801 Supplier Number: 45054203 (USE FORMAT 7 FOR FULLTEXT)  
**Standing the test of time**  
National Home Center News, pPD38  
Oct 10, 1994  
Language: English Record Type: Fulltext  
Document Type: Magazine/Journal; Trade  
Word Count: 720

... its previous occupant, Wardwell Lumber, went out of business.  
The product mix and the item **count** have barely **changed**, but display space has been dramatically expanded. Kitchen and millwork displays now take up about...

...feet each while kitchen displays in the old units filled only 8 linear feet.

The **new** yard, opened May 31, sports a **drive** -through yard allowing customers to **pick** up orders that had to be delivered before. A spacious parking lot is another new...

16/3,K/10 (Item 3 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2004 The Gale Group. All rts. reserv.



01635666 Supplier Number: 42021631 (USE FORMAT 7 FOR FULLTEXT)  
**Int'l China Broadens Beyond Country Style, Offers Fashion**  
HFD-The Weekly Home Furnishings Newspaper, p152  
April 22, 1991  
Language: English Record Type: Fulltext  
Document Type: Magazine/Journal; Trade  
Word Count: 704

... did not die. It's now a challenge for International to come up with an **updated country** design."

Cline said that more recently, Horne's has had success with International's Capri...

...Hauck, assistant vice president of housewares at Service Merchandise, based in Nashville, Tenn., said his **store** has stayed with the Heartland and Marmalade patterns while **picking up newer** International China designs such as Messina and Tripline. "The major reason for Heartland and Marmalade...

16/3,K/11 (Item 1 from file: 160)  
DIALOG(R)File 160:Gale Group PROMT(R)  
(c) 1999 The Gale Group. All rts. reserv.

00491158

**Pacific region retailers' sales are gaining more rapidly than had been projected, according to data from the 1977 Census of Retail Trade, which reports these merchants' retail sales volume at \$109 bil.**  
Sales & Marketing Management June 18, 1979 p. 20,24

... Buying Power' (SBP), a major data source for marketing and sales planning. A table shows **new** 1977 Census sales **volume** (\$000) data for **selected** Pacific and **New** England states, **counties** and cities; the percent **change** in 1972-77; and percentage adjustments for the SBP vs the new Census data.

...

16/3,K/12 (Item 1 from file: 148)  
DIALOG(R)File 148:Gale Group Trade & Industry DB  
(c)2004 The Gale Group. All rts. reserv.

10750010 SUPPLIER NUMBER: 53575623 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Service With a Smile?(retail sales personnel) (Brief Article)**  
Strout, Erin  
Sales & Marketing Management, 151, 1, 16(1)  
Jan, 1999  
DOCUMENT TYPE: Brief Article ISSN: 0163-7517 LANGUAGE: English  
RECORD TYPE: Fulltext  
WORD COUNT: 574 LINE COUNT: 00048

... on employee attitudes," Cohen says.

At the more than 350 Service Merchandise stores across the **country**, employees are going through major **changes** in the way they serve customers. Shoppers used to enter **stores**, **pick** up clipboards, check off items they wanted, and **pick** them up off a conveyor belt. The **new stores** have merchandise on the shelves, allowing customers to **pick** up what they want and also forcing employees out onto the floor. "It's become

16/3,K/13 (Item 2 from file: 148)  
DIALOG(R)File 148:Gale Group Trade & Industry DB  
(c)2004 The Gale Group. All rts. reserv.

06793088 SUPPLIER NUMBER: 14892709 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Clark's 'On The Go' Program hits Kalamazoo by storm. (Clark Refining and**

Marketing Co.; Kalamazoo, Michigan)

Dwyer, Steve

National Petroleum News, v85, n13, p14(2)

Dec, 1993

ISSN: 0149-5267

LANGUAGE: ENGLISH

RECORD TYPE: FULLTEXT; ABSTRACT

WORD COUNT: 721

LINE COUNT: 00053

... s on-the-go mentality. Salty snacks, fountain soda, candy and a modest fast-food **selection** will be front and center at Clark **stores** .

Speaking of Clark's **new** look, Barnholt comments: "We had a couple of goals in mind, but the key was..."

...change. There is no more graphic way to change than through your trade sign, your **logo** . The key was to **change** what the public sees and to have our employees involved in the decision."

For years...

16/3,K/14 (Item 3 from file: 148)

DIALOG(R)File 148:Gale Group Trade & Industry DB

(c)2004 The Gale Group. All rts. reserv.

06194326 SUPPLIER NUMBER: 13342433 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**And this year's winners are.... (1992 Awards of Merit for local government agencies)**

American City & County, v107, n13, p48(10)

Dec, 1992

ISSN: 0149-337X

LANGUAGE: ENGLISH

RECORD TYPE: FULLTEXT; ABSTRACT

WORD COUNT: 6938

LINE COUNT: 00558

... important. For speeding concerns, the 85th percentile speeds and their variance from posted limits was **chosen** .

To address traffic **volume** problems, TCDs were considered where peak hour **volumes** exceed 10 percent of the daily volume. The **county** **currently** is considering **changes** to the criteria whereby excessive volumes also would be defined by an excess of the...

16/3,K/15 (Item 4 from file: 148)

DIALOG(R)File 148:Gale Group Trade & Industry DB

(c)2004 The Gale Group. All rts. reserv.

05496015 SUPPLIER NUMBER: 11486819 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**New uniforms come off the peg. (Sainsbury's)**

Super Marketing, n993, p6(1)

Oct 11, 1991

ISSN: 0261-4251

LANGUAGE: ENGLISH

RECORD TYPE: FULLTEXT

WORD COUNT: 156

LINE COUNT: 00011

... at Sainsbury's Streatham Common store in south London this week, and staff at the **new** Hedge End **store** in Hampshire will also be testing the **new** design.

The blue uniform was **chosen** by a panel of 12 staff and will be worn by the company's 65...

...junior managers and shop staff. The company said, however, that there were no plans to **change** the Sainsbury's **logo** to a matching blue.

PHOTO : Staff will wear the new blue Sainsbury's uniform if...

16/3,K/16 (Item 5 from file: 148)

DIALOG(R)File 148:Gale Group Trade & Industry DB

(c)2004 The Gale Group. All rts. reserv.

04817671 SUPPLIER NUMBER: 09347019 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**Specialty woodwork supplier leases 14,500 square-feet in South Norwalk.**

**(Woodworker's Store of South Norwalk) (Connecticut)**

Stableford, Joan

July 9, 1990

ISSN: 0898-9818

LANGUAGE: ENGLISH

RECORD TYPE: FULLTEXT

WORD COUNT: 512

LINE COUNT: 00042

... has been in operation for the past seven years, said Paul Barringer, manager for the **new Norwalk store**.

The two outlets will operate separately and independently.

"We **selected** Norwalk because it is the heart of our market in Fairfield County. It is located in proximity to the cabinet and furniture makers and the boat- **modifying** trade in the **county**," Barringer said.

The specialty woodworking field is thriving, even in the current economy, he added...

16/3,K/17 (Item 6 from file: 148)

DIALOG(R)File 148:Gale Group Trade & Industry DB

(c)2004 The Gale Group. All rts. reserv.

02491462 SUPPLIER NUMBER: 04018940 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**Town & Country opens Cub to stem competition. (Cub Foods)**

Natschke, Patricia

Supermarket News, v35, p8A(1)

Nov 11, 1985

ISSN: 0039-5803- LANGUAGE: ENGLISH- RECORD TYPE: FULLTEXT

WORD COUNT: 2199 LINE COUNT: 00166

... in the \$70-75 million range, a drop the company attributes to increased competition from **new** Sun Foods and **Pick 'N Save** super warehouse **stores** in its operating area.

The **Town & Country** conventional **stores** **changed** suppliers in mid-June, from Red Owl Stores, Hopkins, Minn., as a primary supplier and...

...to Super Valu, which had been supplying the Cub store, Benidt said.

Delivery arrangements also **changed**: **Town & Country** had its own fleet of trucks picking up product at the supplier's warehouse, but...

16/3,K/18 (Item 1 from file: 15)

DIALOG(R)File 15:ABI/Inform(R)

(c) 2004 ProQuest Info&Learning. All rts. reserv.

01415899 00066886

**Netscape plunks down \$56 million for two companies**

Sliwa, Carol

Network World v14n18 PP: 8 May 5, 1997

ISSN: 0887-7661 JRNL CODE: NWW

WORD COUNT: 571

...TEXT: desired part of the directory by typing a few letters of a name.

Netscape's **new** directory **server** also features clientinitiated **selective** replication, whereby a client reads a **log** that chronicles **changes** to a master directory and then conforms itself to the master, Chen said. But, that...

16/3,K/19 (Item 2 from file: 15)

DIALOG(R)File 15:ABI/Inform(R)

(c) 2004 ProQuest Info&Learning. All rts. reserv.

01415898 00066885

**Netscape's new directory beta supports LDAPv3**

Sliwa, Carol

Network World v14n18 PP: 8 May 5, 1997

ISSN: 0887-7661 JRNL CODE: NWW

WORD COUNT: 570

...TEXT: desired part of the directory by typing a few letters of a name.

Netscape's **new** directory **server** also features clientinitiated **selective** replication, whereby a client reads a **log** that chronicles **changes** to a master directory and then conforms itself to the master, Chen said. But, that...